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BABYLON AND PERSEPOLIS.

BABYLON,
LEARNED AND WISE, HATH PERISH'D UTTERLY,
NOR LEAVES HER SPEECH ONE WORD TO AID THE SIGH
THAT WOULD LAMENT HER.

WORDSWORTH.

GENERAL VIEW OF BABYLON.



NARRATIVE OF A JOURNEY
TO THE
SITE OF BABYLON
IN 1811,

NOW FIRST PUBLISHED:

MEMOIR ON THE RUINS;
WITH ENGRAVINGS FROM THE ORIGINAL SKETCHES BY THE AUTHOR:

REMARKS ON THE TOPOGRAPHY OF
ANCIENT BABYLON,

By MAJOR RENNELL;
IN REFERENCE TO THE MEMOIR:

SECOND MEMOIR ON THE RUINS;
IN REFERENCE TO MAJOR RENNELL'S REMARKS:

WITH NARRATIVE OF A JOURNEY TO
PERSEPOLIS:
NOW FIRST PRINTED, WITH HITHERTO UNPUBLISHED CUNEIFORM INSCRIPTIONS
COPIED AT PERSEPOLIS:

BY THE LATE
CLAUDIUS JAMES RICH, Esq.,
FORMERLY THE RESIDENT OF THE HON. EAST INDIA COMPANY AT BAGDAD.

EDITED BY HIS WIDOW.

LONDON:
DUNCAN AND MALCOLM, PATERNOSTER ROW.

MDCCCXXXIX.

LONDON:

Printed by WILLIAM CLOWES and SONS,
Stamford Street.

P R E F A C E.

THE following Memoirs on the Ruins of Babylon were first published, many years ago, under the direction of Sir James Mackintosh. The edition having become exhausted, and another seeming to be called for, the Editor has undertaken the present work, and has endeavoured to add to it whatever might be likely to render it as complete as circumstances would admit of. For this purpose an Introduction has been prefixed, giving a general view of the history of Babylon; and an Appendix subjoined, containing extracts from the authors referred to in the Memoirs.

It has likewise been suggested to the Editor, that the Journal, from which the Memoirs were composed, might prove a valuable addition to the work. This Journal, or perhaps, more correctly, these Notes of a Journal, are very short; but still a journal is somewhat more animated, from its very

nature, than a topographical memoir can possibly be; and it may assist the imagination of the Reader in forming to himself some general idea of these ruined heaps, while examining the minuter details and measurements contained in the Memoir.

In order, likewise, to assist the Reader in following the Second Memoir, the Editor has obtained permission from the Council of the Society of Antiquaries to republish in this work Major Rennell's Remarks on the Topography of Babylon, suggested by Mr. Rich's observations and discoveries.

The plates by which the present volume is illustrated have been newly executed by that very ingenious artist, Mr. Williams, from Mr. Rich's original sketches.

The second part of this volume, relating to Persepolis, is new. The Journal, some portion of which has already appeared in the latter part of Mr. Rich's work on Koordistan, is only given to serve as an explanation to the arrow-headed inscriptions which were copied by Mr. Rich at Persepolis, and are now published for the first time.

It is hoped that these inscriptions may prove of

use in the progress which appears, at length, to be making in deciphering this hitherto unknown character, both by some learned foreigners*, and by Major Rawlinson, an English officer in Persia, who thinks that he has deciphered an inscription of great length, recording the conquest of Darius the Younger.

In a work of this nature the writer has necessarily been much indebted to others, and is happy to have this opportunity of acknowledging her obligations to Sir R. H. Inglis, Bart.; the Hon. Mounstuart Elphinstone; General Briggs; Colonel Chesney; and William Erskine, Esq.; who have most kindly afforded her such assistance and information as she requested of them.

Notting-hill, January 12th, 1839.

* The labours of Raske, Grotefend, and St. Martin, have been some time before the public. Since that time the German traveller Schulz made copies of some inscriptions near Hamadan, which were submitted to M. Burnouf, a French *savant*, who is equally skilled in Greek, Sanscrit, and Zend; and he has written an essay on Schulz's inscription; and, by an examination with other inscriptions, he has framed a Zend alphabet of the cuneiform character.

Lassen, a countryman of Burnouf, and who is likewise a good Sanscrit and Zend scholar, has also read and translated these tablets; and his alphabet is said not to differ much from Burnouf's. Burnouf has printed a work, in two volumes, called "Commentaries on the Yegna," on the same subject.

LIST OF THE MEMOIRS

CONTAINED IN THIS VOLUME.

Introduction, containing some accounts of Babylon before
and since her fall. By the Editor . . . Page i.

Mr. Rich's Journal of his expedition to Babylon in the year 1811,
from which the following Memoir was composed, now pub-
lished for the first time p. 1

Memoir on the Ruins of Babylon (originally published at Vienna,
in the "Mines de l'Orient"); with new plates, from the
original sketches by Mr. Rich p. 43

On the Topography of Ancient Babylon (suggested by the recent
observations and discoveries of Claudius James Rich, Esq.),
by Major Rennell (reprinted by permission of the Council of
the Society of Antiquaries, from the "Archæologia") . . p. 107

Second Memoir on Babylon; containing an "Inquiry into the
Correspondence between the Ancient Descriptions of Babylon
and the Remains still visible on the Site," with notes (occa-
sioned by the "Remarks" of Major Rennell, published in the
"Archæologia") p. 139

Appendix to the Second Memoir, upon the subject of the Baby-
lonian antiques p. 181

Journey from Bussora to Bushire, Shirauz, Persepolis, &c., in
the year 1821 : to which are added copies of several hitherto
unpublished cuneiform inscriptions, copied at Persepolis
p. 195

General Appendix by the Editor, containing extracts from the
authors referred to in the "Memoir on the Ruins of
Babylon" p. 281

CONTENTS.

INTRODUCTION,

Containing some Account of Babylon, before and since her Fall.
By the Editor.

CONTENTS.

Narrative of a journey to visit the ruins of Babylon in the year 1811 (now first published)—Departure from the encampment at Gherara, near Bagdad—Description of the party—Aggher Koofs—Tauk Kesra—Artificial mounds—Caravan of camels—Beginning of the ruins of Babylon—Deputation from the Governor of Hillah—Ride through the ruins—Large black stone with figures and inscription—Vestiges of walls—The Kasr—Conversation with the Governor of Hillah—The tree called Athelè—The Mujelibè—The enchanted serdaub—Fragments of ruins, with human bones—Marble fragments—The body found in the Mujelibè—Earthen pots—Jewish synagogue at Hillah—Skeleton in a coffin—The tomb of Amran, a son of Ali—The Birs Nemroud—Tribe of Arabs—Tomb of Ezekiel—The statue called the Idol—Return to Bagdad . p. 1—38

MEMOIR ON THE RUINS OF BABYLON.

Originally published at Vienna, in the “Mines de l’Orient,”
with plates. From the Original Sketches by Mr. Rich.

CONTENTS.

General observations on the site of Babylon—Obligations to Major Rennell—Description of the country between Bagdad and Hillah—Khans erected at convenient distances for travellers—The Naher Malcha—Large lion shot by a Zobeide Arab—Description of Hillah—Mesjid-el-Shems—Miracle wrought by the prophet Joshua—his tomb—The sepulchre of Ezra—that of Ezekiel—Revenues of Hillah—the fertility of the soil—The Euphrates’ canals

—Ruins of Babylon on the eastern bank of the river—The embankment—Mounds of Amran—The Kasr—The Mujelibè—Bricks with inscriptions—Dens of wild beasts—Satyrs—The narrow passage in the Mujelibè—Ruins on the western bank of the river—Birs Nemroud—Nebbi Eyoub, or the tomb of the prophet Job—Considerable ruins near Jerbouiya—Articles of gold found among ruins to the southward of Hillah—Ancient descriptions of Babylon—Sepulchre of Belus—Difficulty in discovering which of the ruins is the sepulchre of Belus—Measurements of the Mujelibè and the Birs Nemroud—Compared with that given by ancient authors of the sepulchre of Belus—Question on which side of the river the temple or sepulchre was situated—Generally-received opinion that it stood on the east—The Birs a stupendous pile—Description of the bricks at Babylon—Three kinds of cement—Concluding observations
p. 43—104

ON THE TOPOGRAPHY OF ANCIENT BABYLON,

Suggested by the Recent Observations and Discoveries of Claudius James Rich, Esq. By Major Rennell. [Reprinted by permission of the Council of the Society of Antiquaries, from the “Archæologia.”]

CONTENTS.

General remarks on Mr. Rich's Memoir—His suggestion of the probability that the Birs Nemroud is the representative of the Tower of Belus—Probable change of the bed of the river—The Mujelibè has all the appearance of being the remains of the Tower of Belus—Position of the remains taken for those of the palaces—Herodotus describes only one—Diodorus, two palaces—The mound of the Kasr answers to the remains of the principal palace—In this case a change of the course of the Euphrates must be admitted—Scanty notices respecting the mound of Amran—Remarks on the deserted bed of the Euphrates—The Kasr not a Babylonish structure—Seated on a mound of ruins of Ancient Babylon—Not identified with them—The subterraneous passage—Birs Nemroud—Has not the character of an artificial work—Whatsoever may be its nature, it is too distant from the centre of the remains to be the Tower of Belus—Important to trace the ditch and city-walls—If the artificial canal through Babylon was straight, it may be expected to have left traces—The ground about the mounds south of the Mujelibè should be examined—It should be ascertained what are the qualities of the *substratum* of the Mujelibè—Possibly it is a natural eminence p. 107—134

SECOND MEMOIR ON BABYLON,

Containing an Inquiry into the Correspondence between the Ancient Descriptions of Babylon, and the Remains still visible on the Site, with Notes. Suggested by the "Remarks" of Major Rennell, in the "Archelogia."

CONTENTS.

Reasons for drawing up the first Memoir—Inducement to enter into a discussion on the correspondence between the accounts of the ancient historians and the ruins visited by the author—Difference of opinion with Major Rennell—Major Rennell's argument—Remarks on the ancient historians—None of the ancients say on which side of the river the Tower of Belus stood—Major Rennell's mistake in fixing on the Mujelibè to represent the Tower of Belus—No indication of any change in the course of the river—Description of the Euphrates—The mounds rejected by Major Rennell differ in no respect from those he admits—The walls of the Kasr coeval with the mound—The palaces—No reason to believe the tower was situated on or near the river—The Mujelibè not the Tower of Belus—Insignificant heaps between the Kasr and the Mujelibè—Amran offers no peculiarity meriting attention—Ruins about Hillah all of one character—The evidence for their antiquity—Birs Nemroud—The most interesting of all the Babylonian remains—The Tower of Belus likely to have left considerable traces—Resemblance of the Birs Nemroud to this tower—Birs Nemroud of a nature to fix the locality of Babylon—The Birs and the eastern ruins come within the limits of the city—Description of the Birs Nemroud—Of the Tower of Belus—The whole mass of the Birs Nemroud is artificial—No bitumen springs in Babylon—The Birs Nemroud, in all likelihood, at present in the same condition in which Alexander saw it—The ruins of Babylon, in their present state, may be perfectly reconciled with the best descriptions of the Grecian writers . . . p. 139—171

APPENDIX TO THE SECOND MEMOIR,

Containing an Account of the Babylonian Antiques. With Plates.

CONTENTS.

Hillah the general dépôt for antiques found throughout the country—The most interesting are Sassanian and Babylonian—Most of the

latter contain specimens of the primitive system of writing found only in the Babylonian monuments—and those of Persia—The cuneiform characters—Deciphered by Dr. Grotfend—The cuneiform writing confined to inscriptions on stone and other hard substances—Another mode of writing for ordinary use—Sassanian character—Persepolitan inscriptions—Description of different antiquities—Brick, with writing on it, from Nineveh—Inscriptions—Cylinders p. 181—191

JOURNEY FROM BUSSORA TO BUSHIRE, SHIRAUZ, PERSEPOLIS, &c. IN THE YEAR 1821.

To which are added Copies of several hitherto unpublished Inscriptions at Persepolis.

CONTENTS.

Leave Bussora for Bushire—Curious phenomenon—Cholera Morbus—Great heat—Departure from Bushire—Burauzgoon—Arrival at, and departure from, Daulekee—Pass in the mountains—The plain of Shirauz—Arrival at Shirauz—Leave Shirauz for Persepolis—Persian musician—The river Araxes—Description of the ruins—Nakshi Regib—Rocky hills above Nakshi Rustum—The sun shining on Mader i Sulieman—Description of Mader i Sulieman—Return to Persepolis—Remains of a gateway—Tents pitched beside the first portal—The effect of the ruins by moonlight—The tombs—Fifteen columns of the colonnade still standing—Enormous blocks of stone—Began copying three inscriptions—Nothing Babylonian in the Persepolitan costume—All the inscriptions at Persepolis were in three kinds—Much struck with Grotfend's sagacity—Copied three inscriptions—Ruinous staircase with figures—The Zend occupies the pre-eminent place in all the inscriptions—Unfinished royal sepulchre—Copied inscriptions at Nakshi Regib—Troublesome ride to Nakshi Rustum—The four tombs of the kings of the anti-Alexandrian dynasty—Cuneiform inscriptions—Fire-temple—Bid adieu to Persepolis—Return to Shirauz—Articles of commerce—Bazars—The Hafizia, or the tomb of the poet Hafiz—Valuable copy of his works—The tomb of Saadi—The cholera morbus at Shirauz—Festivities of the Prince's wedding stopped—General confusion in the city . . . p. 195—280

GENERAL APPENDIX. By the Editor.

CONTENTS.		PAGE
No. 1.	Extract from "Rollin's Ancient History" . . .	283
2.	.. "Arrian's History of Alexander's Expedition" . . .	285
3.	.. "The Geography of Strabo" . . .	290
4.	.. "The Cyropedia" . . .	293
5.	.. "The Travels of Pietro della Villa" .	298
6.	.. "M. Beauchamp's Account of the Ruins of Babylon" . . .	301
7.	.. "The Travels of Niebuhr" . . .	303
9.	.. "The Travels of Mr. Buckingham," and Sir R. K. Porter . . .	306
10.	.. "Ive's Travels" . . .	314
11.	.. "Strabo" . . .	315
12.	.. "Rauwolff's Travels," and from the "Travels of John Eldred" . .	317

ERRATUM.

Page 157.—Instead of "Abulfeda," says Al Neel, "is, &c.," *read*, Abulfeda says, "Al Neel is, &c."

DIRECTIONS FOR PLACING THE PLANS & PLATES.

Plates.		Page
I.	General view of the ruins of Babylon.—To face Title-page	
II.	The ground-plan of the ruins.—To face the beginning of the “Memoir on the Ruins of Babylon”	43
III.	View of the Kasr.—To face	65
IV.	View of the embankment.—To face	67
V.	View of the Mujelibè.—To face	68
VI.	View of the Birs Nemroud.—To face	93
VII.	Sketch of the site of Babylon, by Major Rennell.—To face	105
VIII. IX. X.	} Babylonian antiques and inscriptions.—To be placed at the end of the “Appendix” containing the account of the Babylonian antiques.—To face	192
XI.	View of Mader i Sulieman.—In	240

The following Inscriptions to be placed at the end of the Journey to Persepolis.

Plates.		Page
XII.	Inscriptions at Morghaub and Nakshi Regib.—Referred to in	254
No. 1.	{ XIII. XIV. XV. } Three tablets.—Referred to in	248
No. 2. No. 3.	{ XVI. XVII. XVIII. } Three tablets, and three small tablets.—Referred to in	251
No. 4.	XIX. Inscription in the building south-east of the first, after passing the colonnade.—Referred to in	251
No. 5.	{ XX. XXI. XXII. } Three tablets.—Referred to in	250
No. 6.	XXIII. Tablet in the centre of the north-east face of the platform.—Referred to in	251
No. 7.	{ XXIV. XXV. XXVI. } Three tablets.—Referred to in	254

INTRODUCTION.

SOME ACCOUNT OF BABYLON, BEFORE AND SINCE
HER DESTRUCTION.

IN re-publishing Mr. Rich's Account of the Ruins of Babylon, as they existed when he visited them in the year 1811, it has been thought desirable to prefix a sketch of some of the leading circumstances connected with the history of that celebrated city.

Many circumstances combine to make this rather a difficult task to the Editor, and one which must necessarily be very imperfectly executed.

The present account, which is drawn up from a very interesting Memoir on the subject of Babylon by M. de St. Croix, that appeared in the "*Mémoires de l'Academie des Inscriptions*" in the year 1789, and is referred to by Mr. Rich, will enable the reader to follow the history of this city through many ages. The Editor

has added, from other sources, some further particulars, which seemed requisite in order to complete the account; but has endeavoured to make the whole as concise as was possible, consistently with the object in view, which was to revive the recollections of some readers, to supply information to others, and to assist the traveller in the East, who can rarely carry many books of reference about with him.

The first mention we find in history of Babylon, or Babel, is in the Bible. In the tenth chapter of Genesis, at the tenth verse, speaking of Nimrod, it is added, “and the beginning of his kingdom was Babel, and Erech, and Accad, and Calneh in the land of Shinar.”*

It is surely worthy to be observed that little if any further notice is taken of this great city in the Sacred Volume, until the time of its connexion with the history of the Jewish people, and, even then, our attention is chiefly directed to the punishment and ruin that are about to fall upon it for its wickedness. During this interval it had become the splendid capital of a most powerful empire—the teacher of other nations in every kind of knowledge—the mistress of the world in arts and sciences, and civilization! But all these things, so great in the eyes of men, are passed by in silence, or slightly referred to in the Bible, that History of Nations, written

* This is supposed to have been about 2300 years before Christ, or about 1300 years after the creation of the world.

by God, who there points out to us what He accounts of importance in history, and what insignificant. He tells us that the advancement of nations in civilization and knowledge are nothing in His sight, unless there be a corresponding advancement in reverence, and obedience, and love to Himself, and in true loving-kindness among men, to each other. It would be well for mankind if they would but look upon things truly, as they bear upon the wonderful history of man which is eternal; and they would be much helped in so doing, if they observed how these things are spoken of by the Creator and Father of Men.*

Of Babylon—that glory of kingdoms, that beauty of the Chaldees' excellency, that city so great among the nations of the earth—He speaks only with indignation—for having striven against Him; for having been proud against Him; for having been unmerciful; for having been given up to pleasure; for dwelling carelessly; for saying, "I shall not sit as a widow, neither shall I know the loss of children."† Her wisdom and her knowledge, God says, perverted her; her enchantments and the multitude of her sorceries made her brutish, and

* A very remarkable book has lately been published, entitled, "The French Revolution," by Thomas Carlyle, which contains a most powerful unveiling of this *true history*, and sweeps away all the unrealities and falsehoods with which men endeavour to delude themselves. This work is, surely, a great gift to men, in this day of confusion and perplexity. May it prove a word of warning, and not of prophecy, to England!—ED.

† Isaiah, chap. xlvii.

she said in her heart, " I am, and none else beside me."*

In order to obtain any details concerning this great first sample of man's mighty works, by which, during so many ages since, he has been dazzled and intoxicated, notwithstanding the warning thus early given him by his faithful Creator, we must have recourse to other sources, which, however, are very abundant, for Babylon appears to have been an object of admiration to all the ancients. By some of the ancient authors the building of Babylon is attributed to Semiramis,† who probably embellished, or enlarged it, and hence got the name of being its founder.

The principal works which rendered it so famous were the walls of the city, the palaces, quays, and the bridge, the lake, banks, and canals; the hanging gardens, and the Temple of Belus. The city stood on a large and very fertile plain. The walls were 87 feet thick, 350 in height, and in compass 480 furlongs, or 60 English miles. They were all built of large bricks, cemented together with bitumen. A trench, deep, wide, and full of water, surrounded the city. " It is proper," says Herodotus, " that I should say in what manner the earth removed from the trench was disposed of, and how

* Jeremiah, chaps. l., li.

† Herodotus tells us that she raised an embankment worthy of admiration through the plain, to confine the river Euphrates, which heretofore often spread over that level country like a lake.

the wall was constructed. The earth, as fast as it was removed from the trench, was converted into bricks, and baked in furnaces; when thus prepared, melted bitumen was used instead of mortar,* and between every thirtieth course of bricks there was a layer of reeds. The sides of the trench were first lined with brick-work, and then the wall raised in the manner described." The gates, of which there were 25, were all made of solid brass.† At different intervals between these gates were towers, said to have been 10 feet higher than the walls.

The reader is probably aware that some of the ancient authors describe the walls of Babylon as being drawn round the city in the form of a square; and that 25 streets, each 15 miles long and 150 feet broad, went in straight lines to the 25 gates, which were directly over against them, on the opposite sides, so that the whole number of the streets were 50, whereof 25 went one way and 25 the other, directly crossing each other at right angles. And besides these there were also four half streets, which had houses only on one side, and the wall on the other; these went round the four sides of the city next the walls, and were each of them 200 feet broad. By these streets thus crossing each other, the whole city is described as cut out into 676 squares, each of which was four furlongs and a half on every side, that is, two miles and a quarter in

* See Mr. Rich's observations on Gen. xi. 3, in the "Memoir on the Ruins of Babylon," p. 98.

† Isaiah xlv. 2.

circumference. Round these squares, on every side, towards the streets, stood the houses (which were not contiguous, but had void spaces between them), all built three or four storeys high, and beautified with all manner of ornaments towards the streets. The space within, in the middle of each square, was likewise all void ground, employed for gardens, &c., so that Babylon was greater in appearance than reality; near one half of the city being taken up in gardens and other cultivated lands, as we are told by Quintus Curtius.

The ancient authors differ as to the number of royal palaces in Babylon. Herodotus mentions only one,* but other authors speak of two, which they describe as situated at the two ends of the bridge, having a communication with each other by means of a tunnel, built under the channel of the river. The old palace, which stood on the east side of the river, was three miles and three-quarters in compass, near which stood the Temple of Belus. The new palace, which stood on the west side of the river, opposite to the other, was seven miles and a half in compass. It was surrounded with three walls, one within the other, with considerable spaces between them. These walls, as also those of the other palace, were embellished with a variety of sculptures.

* His words are, "In the centre of each portion of the city is an enclosed space; the one occupied by *the royal palace*, a building of vast extent and great strength; in the other stands the Temple of Belus with its brazen gates, remaining in my time."—Herod. (Taylor's Translation), p. 86.

In the last, or new palace, were the hanging gardens. They contained a square of 40 feet on every side, and were carried up aloft into the air, in the manner of several large terraces, one above another, till the height equalled the walls of the city. The ascent was from terrace to terrace, by stairs 10 feet wide. The whole pile was sustained by arches raised upon other arches, one above another, and strengthened by a wall, surrounding it on every side, of 22 feet in thickness. On the top of the arches were first laid large, flat stones, 16 feet long, and 4 broad; over these was a layer of reeds, mixed with a great quantity of bitumen, upon which were two rows of bricks, closely cemented together with plaster. The whole was covered with thick sheets of lead, upon which lay the mould of the garden. And all this floorage was contrived to keep the moisture of the mould from running away through the arches. The mould or earth laid hereon was so deep that the greatest trees might take root in it; and with such the terraces were covered, as well as with all other plants and flowers that were proper to adorn a pleasure-garden. In the upper terrace there was an engine, or kind of pump, by which water was drawn up out of the river, and from whence the whole garden was watered. In the space between the several arches upon which this whole superstructure rested, were large and magnificent apartments, that were very light, and had the advantage of a beautiful prospect. But by far the greatest and

most interesting work at Babylon was the Temple of Belus,* which is said by some authors to have stood near the old palace. Herodotus, who mentions only one, describes the Temple of Belus as standing in an enclosed space, in the centre portion of the city, opposite to the palace. "It is," says Herodotus, "a square structure, each side measures two stadia. Within the enclosure is erected a solid tower, measuring a stadium both in width and depth; upon this tower is raised another and another, making eight in all. The ascent is by a path which is formed on the outside of the towers. Midway in the ascent is a resting-place, furnished with easy chairs, in which those who ascend repose themselves. On the summit of the topmost tower stands a large temple, and in this temple is a great couch, handsomely fitted up, and near it stands a golden table. No statue whatever is erected in the temple. Within the precincts of the Temple of Belus," adds the same author, "there is a smaller edifice on the ground, within which there is an immense golden statue of Jupiter in a sitting posture; around the statue are large tables, which, with the steps and throne, are all of gold, and, as the Chaldeans affirm, contain 800 talents of gold. Without

* The meaning of Belus is Heaven, God, or Lord, says M. de St. Croix. Upon which he observes, "The inhabitants of Mesopotamia had not always been idolaters; and though they became such, they for a long time acknowledged the supremacy of the God of Nachor, and of Abraham."

this edifice is a golden altar; there is also another altar of great size, on which are offered full-grown animals. Upon the golden altar it is not lawful to offer any sacrifices, except sucklings. Once in every year, when the festival of this god is celebrated, the Chaldeans burn upon the greater altar 1000 talents of frankincense. There was also, not long since, in this sacred enclosure, a statue of gold, 12 cubits in height; at least, so the Chaldeans affirmed. I did not myself see it. This figure Darius Hystaspes would fain have taken, but dared not execute his wishes. But his son Xerxes, not only took it, but put to death the priest who endeavoured to prevent its removal.* Such was the magnificence of this temple, which contained also many private offerings.”†

Among the stupendous works of Babylon, described by ancient authors, none seem to have excited more wonder and admiration than those for the preservation of the city from the effects of the inundations of the Euphrates, which, during the summer months, or after the melting of the snows on the mountains of Armenia, overflows its banks, from the very great increase of waters which run into it at that season.

To prevent the damage which both the city and

* According to the calculation which Diodorus makes of the riches contained in this temple, the sum total amounted to above 21 millions sterling.

† Herodotus. (Taylor's Translation, p. 87.)

the country received from these inundations, there were cut, at a very considerable distance above the town, two artificial canals, which turned the course of these waters into the Tigris before they reached Babylon. And to secure the country yet more from the danger of inundations, and to keep the river within its channel, prodigious banks were raised on both sides of the river, built with bricks cemented with bitumen,* which began at the artificial canals, and extended below the city.

To facilitate the making of these works, it was necessary to turn the course of the river another way, for which purpose, to the west of Babylon, was dug a prodigious artificial lake, 40 miles square, 160 in compass, and 35 deep. Into this lake was the whole river turned by an artificial canal, cut from the west side of it, till the whole work was finished, when it was made to flow in its former channel. But that the Euphrates in the time of its increase might not overflow the city, through the gates on its banks, this lake with the canal was still preserved. The water received into the lake at the time of these overflowings was kept there all the year, as in a common reservoir, for the benefit of the country, to be let out by sluices, at all convenient times, for the watering the lands below it. The

* Herodotus says, "Eight days' journey from Babylon is a city named Is, near which runs a small river of the same name, discharging itself into the Euphrates. This river brings down with its waters clots of bitumen in large quantities. From this source was derived the bitumen used in cementing the walls of Babylon."

lake was thus made equally useful in defending the country from inundations, and in rendering it more fertile.

Herodotus attributes these magnificent and useful works to the two queens, Semiramis and Nitocris, between whose reigns there was an interval of five generations. He tells us that Semiramis raised an embankment worthy of admiration through the plain, to confine the river, which heretofore often spread over the level like a lake ; and Nitocris, he adds, left monuments, some of which he proceeds to describe. “ Seeing the Medes already possessed of extensive empire, and restlessly extending their power, by taking city after city, among which was Nineveh, she resolved in good time to secure herself against them in the best manner possible. In the first place, therefore, as the river Euphrates ran in a straight course through the city, she formed excavations at a distance above it, by which means its course became so tortuous, that it three times passed a certain town of Assyria, called Ardericca : travellers from our sea,* in descending the Euphrates towards Babylon, three times arrive at that town in the course of three days. She also raised both banks of the river to an amazing height and thickness. At some distance above Babylon, and near

* Persons from *this* sea, the Mediterranean, that is, travellers from Greece.

the river, she dug a reservoir in the marsh, of such depth as to drain it. The width of this excavation was such as to make its circuit 420 stadia. The earth removed from it was taken to raise the banks of the river: this done, she brought stones, with which the sides of the lake were lined. Both these works, the diverting of the river and the reservoir, were formed with the intention of rendering the current less rapid by its many windings, which broke its force, and, at the same time, made the navigation more circuitous; so that those who descended towards Babylon by water might have a long circuit around the lake.

“The city being divided into two portions by the river in former times, whoever wished to pass from the one to the other was obliged to take a boat, which manifestly was a great inconvenience. This defect she supplied: when she had dug the lake in the marsh, she availed herself of the occasion to construct another monument also by which her fame will be perpetuated. She caused stones of great magnitude to be hewn; and when they were ready, the lake being empty, she turned the waters of the Euphrates into it, which, as it filled, left the old channel dry. Then she both lined the sides of the river and the descents from the gates with burnt bricks, in like manner as the city walls; and with the stones already mentioned she constructed, as near the middle of the city as possible, a bridge, binding

the stones together with iron and lead. During the day planks of wood were extended from pier to pier, so as to form a pathway; they were withdrawn at night, to prevent the people from passing over to plunder each other. This bridge was, as we have said, formed by withdrawing the water of the Euphrates into the artificial lake: when completed, the river was restored to its ancient channel; the propriety of this mode of proceeding then became apparent, by means of which the citizens obtained the accommodation of a bridge."

The luxury and wealth of the Babylonians seem to have corresponded with the magnificence of their city. Herodotus gives a striking proof of the very great fertility of the soil of the surrounding country. He says, "All the countries under the great king are divided into parts to supply provisions for his household and his army, each part furnishing food for one month. Now, the region of Babylonia is charged with the supply for four months out of the twelve; the remaining eight months being provided for by the whole of Asia. Thus it appears that this Assyrian region, in produce, bears the proportion of one-third to the entire extent of Asia.* The government of this region is by far the richest of all the provinces. Little rain falls in Assyria, but the corn receives its supply at the root, being fed with water for its nourishment from the river till the ear is

* The Persian dominions in Asia.

ripened. This fertilization does not take place, as in Egypt, by the river overflowing the fields, but the lands are irrigated by the hand or by pumps; for the whole region of Babylonia is, like Egypt, everywhere intersected by canals. The largest of these canals is navigable, and, turning towards the south-east, connects the Euphrates with another river, the Tigris, on which Nineveh stood. This region is, of all lands we know, the richest in the gifts of Ceres; but it does not afford any produce from such trees as the fig, the vine, or the olive. Yet so favourable is the soil to the growth of corn, that it ordinarily yields two hundred fold, and sometimes three hundred. The leaves both of the wheat and barley in this region are four fingers broad. As for millet and sesame (Indian corn), the plant becomes a tree of such magnitude, that, though I have personal knowledge of the fact, I forbear to mention its size, feeling assured that to those who have never visited the province of Babylonia, what I have already said of its produce will appear incredible. They use no oil, except that which is made from sesame. Palm-trees grow throughout the plain, which for most part bear fruit, and from this fruit is prepared a kind of bread, as well as wine and honey."

Having thus it is hoped given the reader some idea of Babylon, during the time of her prosperity, it may be well to begin the description of her decay, with some of those passages in Scripture where it had long been foretold:—

“And Babylon, the glory of kingdoms, the beauty of the Chaldees’ excellency, shall be as when God overthrew Sodom and Gomorrah! it shall never be inhabited, neither shall it be dwelt in, from generation to generation, neither shall the Arabian pitch his tent there, neither shall the shepherds make their fold there; but wild beasts of the desert shall lie there, and their houses shall be full of doleful creatures, and owls shall dwell there, and satyrs shall dance there, and the wild beasts of the islands shall cry in the desolate houses, and dragons in their pleasant palaces; and her time is near to come, and her days shall not be prolonged*”

In the succeeding chapter, the fall of the last King of Babylon is announced. The cedars of Lebanon are supposed to rejoice over his destruction—“Since thou art cut down no feller is come up against us.” Upon his arrival in the place of departed spirits, all the chief men of the earth, the kings of the nations, come forward to meet him. At the sight of him they exclaim, “Art thou, also, become weak as we: art thou become like unto us? Is thy pomp brought down to the grave? the noise of thy viols?—the worm is spread under thee, and the worms cover thee. How art thou fallen from heaven! oh, Lucifer, son of the morning! How art thou cut down to the ground, which didst weaken the nations! For thou hast said in thy heart, I will ascend into heaven,

* See Isaiah, chap. xiii.

I will exalt my throne above the stars of God. I will sit, also, upon the mount of the congregation. I will ascend above the heights of the clouds. I will be like the Most High! Yet, thou shalt be brought down to hell, to the sides of the pit. They that see thee shall narrowly look upon thee, and consider thee, saying, Is this the man that made the earth to tremble, that did shake kingdoms?" *

Then, in the 22nd verse, the Prophet turns from the King to the people, and says, "I will rise up against them, saith the Lord of Hosts, and cut off from Babylon the name, and remnant, and son, and nephew, saith the Lord. I will also make it a possession for the bittern, and pools of water; and I will sweep it with the besom of destruction, saith the Lord of Hosts. The Lord of Hosts hath sworn, saying, Surely as I have thought, so shall it come to pass; and as I have purposed, so shall it stand." †

* M. de St. Croix's paraphrase of this passage is very striking:—"The princes and great men advance in the place of departed spirits to meet him. At sight of him they exclaim, Art thou really fallen from thine exalted throne, where thou didst shine like the morning star in the heavens—what arm has been strong enough to make him lick the dust, who was the terror and the scourge of nations? Thou saidst in thy heart, I shall mount above the clouds. I will elevate myself up to heaven. I will establish my throne above the stars; and I will walk beside the Most High. In the midst of thy projects of ambition, thou hast been precipitated into the grave!"

† Isaiah, chap. xiv. Thus rendered by M. de St. Croix,—"The Almighty has spoken: I will extinguish the very name of Babylonian, and the posterity even to the last remnant of this hateful race. The place of their abode will I give over to birds of prey and reptiles.

Jeremiah * repeats this prophecy, with some additional circumstances.†

The Psalmist, in addressing Babylon, says,‡ “ O, daughter of Babylon, who art to be destroyed; happy shall he be, that rewardeth thee as thou hast served us. Happy shall he be, that taketh and dasheth thy little ones against the stones.” §

A marsh shall occupy its place, and an abyss shall swallow it up in everlasting forgetfulness.”

* Jeremiah, l., li.

† Upon which M. de St. Croix observes, that Jeremiah and Ezekiel follow less scrupulously the order of time than the other prophets; and that, therefore, we need not be surprised to find that Jeremiah has referred to one period, events which relate to several, and which happened successively. As St. Jerome says, it is one thing to write history, and another to write a prophecy under the immediate effect of inspiration. The first of these periods relating to the ruin of Babylon was in the time of Cyrus. He took the city, which henceforward ceased to be the chief seat of the empire; for this prince and his successors resided here only during one part of the year. He, according to Berossus, issued a command to destroy the walls of the city, in order to prevent a rebellion. But Herodotus and Xenophon say nothing of this order, and the conquest of the city by Darius the son of Hystaspes makes the truth of the matter clear to us; the particulars of which are too well known to require to be repeated. The rebellion of the Babylonians at this time was the cause of all their misfortunes. Darius commanded that the walls of their city should be destroyed, and he carried away the gates, which, before him, adds Herodotus, Cyrus had not done. This is conclusive: so that either Berossus must have been mistaken, or Josephus, in citing the passage from the Chaldean author, must have confounded together the two conquests. Jeremiah speaks of the destruction of the walls, but he refers it to the end of all the disasters which that city experienced, and he attributes it to a King of Media. Consequently nothing makes it improbable that Darius was the author of the demolition of the walls.

‡ Psalm cxxxvii.

§ This passage, according to M. de St. Croix, must refer to Cyrus. Isaiah, he adds, after having compared him to a lion, and the Babylonians to timid deer, flying before him, proceeds to describe the massacre of the people in the very heart of their city, and as unable

And the Lord, through Jeremiah, commands Cyrus "to go up against the land of the *rebels* ; * waste and utterly destroy after them, saith the Lord, and do according to all that I have commanded thee. A sound of battle is in the land and of great destruction. How is the hammer of the whole earth cut asunder and broken ! how is Babylon become a desolation among the nations ! I have laid a snare for thee, and thou art also taken, O Babylon, and thou wast not aware : thou art found, and also caught, because thou hast striven against the Lord.

"The Lord hath opened his armoury, and hath brought forth the weapons of his indignation : for this is the work of the Lord God of hosts in the land of the Chaldeans. Come against her from the utmost border, open her storehouses : cast her up as heaps, and destroy her utterly : let nothing of her be left.

"Call together the archers against Babylon : all ye that bend the bow, camp against it round about ; let none thereof escape : recompense her according to her work ; according to all that she hath done, do unto her : for she hath been proud against the Lord, against the Holy One of Israel.

"Therefore shall her young men fall in the streets,

to escape from the victorious soldiers, who appeared to be less eager in the pursuit of plunder than in the shedding of the blood of their enemies. "Every one that is found shall be thrust through, and every one that is joined to them shall fall by the sword. Their children also shall be dashed to pieces before their eyes."—Isaiah, xiii. 15, 16.

* See the marginal note on Jeremiah, l. 21, in Bagster's Bible.

and all her men of war shall be cut off in that day, saith the Lord. Behold, I am against thee, O thou most proud, saith the Lord God of hosts : for thy day is come, the time that I will visit thee. And the most proud shall stumble and fall, and none shall raise him up : and I will kindle a fire in his cities, and it shall devour all round about him.”*

No mention is made by Herodotus of these massacres, but Xenophon informs us that, the soldiers of Cyrus’ army having murdered vast numbers of the Babylonians, he issued a command to his cavalry to massacre only those who were found in the streets ; and he commanded the inhabitants, upon pain of death, to keep within their houses.

The Prophecies of David, Isaiah, and Jeremiah, were thus literally accomplished ; and the narratives of the two latter supply us with those details which the Greek authors have neglected to relate. Indeed there can be no doubt that the Babylonians were treated with much more severity by Cyrus than either Herodotus or Xenophon seem to have been aware of, or perhaps were willing to allow.

With this conquest of Babylon perished the Chaldean empire, by which so many other empires had been destroyed ; and, as had been prophesied, the hammer which had broken the nations to pieces was at length itself broken.†

* Jeremiah, chap. 1.

† “How is the hammer of the whole earth cut asunder and broken! how is Babylon become a desolation !”—Jer. 1. 23.

Darius continued the work of desolation begun by Cyrus, and, not satisfied with destroying the outer walls of Babylon, he shed much blood within the city, and put to death 3000 of her principal citizens.

“Bel boweth down, Nebo stoopeth, their idols were upon the beasts, and upon the cattle : your carriages were heavy loaden;* they are a burden to the weary beast.† They stoop, they bow down together; they could not deliver the burden; but themselves are gone into captivity.”‡

Jeremiah makes use of very similar language,—“Babylon is taken, Bel is confounded, Merodach is broken in pieces; her idols are confounded, her images are broken in pieces.”§ And, in another place, he is commanded to say, “I will punish Bel in Babylon, and I will bring forth out of his mouth that which he hath swallowed up: and the nations shall not flow together any more unto him: yea, the wall of Babylon shall fall.”||

We learn from Herodotus that Xerxes laid hands upon the massive statue of gold in the Temple of Belus, of which Darius had not ventured to make

* These huge statues were generally formed of baked clay, faced with bronze. It is not, therefore, surprising that the fragments of them should be a sufficient load for several camels.

† M. de St. Croix thus renders these words of the prophet:—“Bel has been broken; Nebo has been shivered to pieces; and their ponderous remains bow down the camels and the horses which are loaded with them.”

‡ Isaiah xlv. 1, 2.

§ Jeremiah l. 2.

|| Jeremiah li. 44.

himself master ;* and that he likewise forced open the Tomb of Belus, in hopes of discovering a great treasure.

Weak and broken as Babylon by this time had become, these acts of violence caused a rebellion among the people. It was easily quelled, and Xerxes, in order to punish the inhabitants for their revolt, and to humble the pride of the priests, who had been the instigators of the rebellion, commanded that the vast and magnificent Temple of Belus should be destroyed. And Arrian, who relates this fact, adds that all the other great buildings experienced the same fate. "When Alexander left Arbela," says Arrian, "he hasted straight to Babylon, and when he came nigh to the city he drew up his whole army in order of battle ; but the Babylonians, having notice of his approach, threw open their gates, and in vast multitudes, with their priests and chief men, went out to meet him, offering him great gifts, besides delivering the city, the tower, and the royal treasure into his hands. Alexander entering the city commanded the Babylonians to rebuild the temples there which Xerxes had destroyed, and especially the Temple of Belus, whom the Babylonians wor-

* In the supposed letter of Jeremiah to the Jews on being led captives to Babylon, Baruch thus makes Jeremiah speak :—"Now ye shall see in Babylon gods of silver, and of gold, and of wood, borne upon shoulders, which cause the nations to fear : beware, therefore, that ye in nowise be like to strangers, neither be ye afraid of them when ye see the multitude before them, and behind them, worshipping them."—Apocrypha, Baruch, vi. 3, 4.

shipped as their chief god. He consulted the Chaldeans in this city about the restoration of the temples, and whatever they advised he performed; and in particular by their advice he offered sacrifice to Belus.”*

Alexander, who was very desirous of restoring the splendour of Babylon, undertook to rebuild the Temple of Belus; but the mass of rubbish under which it lay buried was so immense, that Strabo tells us 10,000 men would have been required to work for two months in only clearing it away.

Alexander was ambitious of rebuilding this temple upon a more magnificent scale than the former one, and was eagerly assisted in his purposed undertaking by all except the Jews, who alone refused to have anything to do with the work.

However, notwithstanding all his efforts, the work went on but slowly, and in order to accelerate it he, on his return from India, hastened back to Babylon with his army, that the soldiers might assist in the labour. But he had come back to Babylon to die; and from that time all idea of rebuilding the Temple of Belus was given up.†

At the period of Alexander's death, Babylon was

* “Arrian's History of Alexander's Expedition,” translated by Mr. Rooke, vol. i. chap. xvi. p. 153.

† M. de St. Croix remarks upon this failure of Alexander's—“We ought to be struck with the ways of Providence upon this and other similar occasions. At the very moment when everything seemed about to prove the failure of the oracles of God, then were they on the point of being completely and perfectly fulfilled.”

completely fallen from her ancient splendour, and was beginning to wear a deserted appearance.

The houses were few and scattered abroad, and the rest of the area of that once flourishing city was now turned into fields and cultivated lands. Indeed, Alexander, who had desired to be the restorer of Babylon's splendour, may be considered as her final destroyer. He was the first who broke down the innermost or sole remaining wall of the city, the two outer ones only having been ruined by Darius ; * and it was in his time likewise that the worship of Bel ceased.

But he was an instrument in the hand of God, whose unchangeable and secret purposes he, like all other conquerors, executed without knowing it, and even against his will.† By him were accomplished the Prophecies of Isaiah and Jeremiah, and Babylon was finally and completely destroyed. ‡

Thou saidst, I shall be a lady for ever : so that thou didst not lay these things to thy heart, neither didst remember the latter end of it. Therefore hear now this, thou that art given to pleasures, that dwellest carelessly, that sayest in thine heart, *I am*, and none

* "Thus saith the Lord of Hosts : the broad walls of Babylon shall be utterly broken, and her high gates shall be burnt with fire ; and the people shall labour in vain, and the folk in the fire, and they shall be weary."—Jeremiah, li. 58.

† "I am the Lord, and there is none else, there is no God beside me : I girded thee, though thou hast not known me."—Isaiah xlv. 5.

‡ M. de St. Croix considers Alexander as the last scourge spoken of by the prophets in the threatened ruin of Babylon ; and it is his opinion that this has been overlooked by interpreters of prophecy.

else beside me ; I shall not sit as a widow, neither shall I know the loss of children : but these two things shall come to thee in a moment in one day, the loss of children, and widowhood: they shall come upon thee in their perfection for the multitude of thy sorceries, and for the great abundance of thine enchantments, &c.”*

“Howl ye ; for the day of the Lord is at hand ; *it shall come as a destruction from the Almighty.* Behold, the day of the Lord cometh, cruel both with wrath and fierce anger, to lay the land desolate : and he shall destroy the sinners thereof out of it.”†

“How is the hammer of the whole earth cut asunder and broken ! how is Babylon become a desolation among the nations !” “Though Babylon should mount up to heaven, and though she should fortify the height of her strength, yet from me shall spoilers come unto her, saith the Lord. . . Because the Lord hath spoiled Babylon, and destroyed out of her *the great voice.*”‡

At the time when Demetrias Poliorcetes took possession of Babylon, two fortresses alone remained of all its magnificent fortifications, and were its sole defence ; and before his arrival Patroclus, a General of Seleucus, had driven the inhabitants of Babylon out of their city. Most of them, we are informed by Diodorus, retreated far from the Euphrates, and fled into the desert ; others took refuge upon the

* Isaiah xlvii.

† Isaiah xliii. 6. 9.

‡ Jeremiah l. and li.

further shores of the Tigris, and down towards the south of Persia.

Seleucus Nicator, who succeeded Alexander in this portion of his empire, determined to abandon Babylon altogether, and to transfer the capital of his empire to the city which he had founded on the banks of the Tigris, and to which he had given his own name; and Pausanias informs us that the Babylonians were compelled by that prince to come and settle there.

“The walls of Babylon,” adds this author, “and the Temple of Belus, had almost ceased to exist, though there were still a few Chaldeans who continued to dwell around the latter edifice.”

Pliny assures us that Babylon was swallowed up by Seleucia, and became quite a wilderness. Strabo says much the same thing, but his language is very remarkable. “None of Alexander’s successors ever cared more for Babylon; and the remains of that city were entirely neglected. The Persians destroyed one part of it, and time, and the indifference of the Macedonian princes, completed its ruin, especially after Seleucus Nicator had built Seleucia in its neighbourhood. This prince and his successors manifested a decided preference to the latter place, and fixed there the capital of their empire. At the present time Seleucia is actually a much more considerable city than Babylon, which is to a great degree deserted, and to which may be applied, without any

hesitation, the words of the comic poet, ‘ the great city is a great desert.’ ”

Before it fell into the condition described by Strabo, this city had been subjected to much oppression. About 127 years before J. C. a Parthian general reduced a great number of Babylonian families into slavery, and sent them away to Media to be sold. He destroyed all that remained of the public buildings, overturned the temples, and spared no monument of ancient splendour.

In the reign of Augustus, we learn from Diodorus Siculus, that in his time a very small portion of Babylon was still inhabited, and that the remainder was under cultivation.

Strabo, who wrote in the time of Tiberius, could not have been informed of the latest misfortunes of this miserable city, and he says, merely in a general way, as has been already related, that it was quite deserted.

Babylon never recovered such a succession of misfortunes, and seems only to have owed to her ancient celebrity the preservation of her name among the cities of the East. Nevertheless she might have lingered on in her reduced and feeble condition some time longer, had not religious intolerance given rise to a civil war, the cause of which was the devotedness of the Jews to their religion. A large body of that people had taken refuge in Babylon, many of whom perished in this persecu-

tion ; and those who escaped being massacred were unable to support the cruel exactions to which they were subjected, and fled from Babylon to Seleucia. Six years after tranquillity had been restored the plague ravaged Babylon, which, together with fresh emigrations of the people, thoroughly drained her of her inhabitants.

From the time of these events, which took place in the reign of Caligula, Babylon seems almost to have been forgotten, and is hardly mentioned in the expeditions of Trajan and Severus into Mesopotamia.

Pliny, who composed his work under Vespasian, seems to have heard of the emigrations, but not to have known the true cause.

The writers of the succeeding century, who were natives of the East, differ but little from each other in their accounts of the fate of Babylon.

Lucian of Samosata, which was a town not far from the Euphrates, who flourished under Marcus Aurelius, speaks of Babylon as a city that had once been remarkable for its numerous towers and vast circumference, but which would soon disappear as Nineveh had done.

From the 4th to the 10th century of the Christian era, Babylon is only occasionally and slightly mentioned by different authors, and is even sometimes confounded with Seleucia. In the 10th century the abridger of Strabo says positively that Babylon was

at that time deserted, and that even her rival Seleucia had lost her name.*

The ecclesiastical writers of those ages speak of Babylon as having been long ago destroyed. In the 3rd century Eusebius of Cæsarea informs us that the people of the surrounding country, as well as strangers, avoided it, for it had become completely a desert.

St. Jerome believed that the ancient walls had been repaired, and that they surrounded a park in which the Kings of Persia kept animals for hunting. He says he learnt this from an Elamite father residing at Jerusalem, but he was evidently satisfied that in his time there were but few remains of Babylon.

Cyril of Alexandria, who flourished about 412, tells us that, the canals drawn from the Euphrates having filled up, the soil of Babylon had become nothing better than a marsh. Theodoret, who died in 460, says that this city was no longer inhabited, either by Assyrians or Chaldeans, but only by some Jews, whose houses were few and scattered abroad. He further adds that the Euphrates had changed its course, and passed through the town only by means of a small canal.

In conclusion :—Procopius of Gaza in the middle

* Upon which M. de St. Croix remarks—"Man builds in vain ; he seems to labour *pour le néant*. How many cities have been, the very names of which are forgotten !"

of the 6th century speaks of Babylon as having been a long time destroyed.

We thus clearly gather from these various authorities, that in the 5th century every purpose of the Lord *had been* performed upon Babylon, to make the land of Babylon a desolation without an inhabitant; and Babylon *had become heaps*, a dwelling-place for dragons, an astonishment, and an hissing, without an inhabitant.*

Thenceforward the only mention made of Babylon by the Mahometans and early European travellers is as a mass of unshapely, solitary ruins, where the animals at enmity with man found a safe refuge.

Ibn Haukal, in 917, speaks of "Babel as a small village." The Persian geographer some time after assures us "that hardly any remains of Babylon were to be seen." From Benjamin of Tudela, the Jewish traveller, we learn in the 12th century that nothing was to be seen but the ruins of Nebuchadnezzar's palace, into which no one dared to enter on account of the quantity of serpents and scorpions with which it was infested.

In the reign of Elizabeth an English merchant, of the name of Eldred, sailed in the year 1583 from London to Tripoli in Syria, from whence he proceeded first to Aleppo, then in three days to Bir, on the Euphrates, where he hired a boat, and sailed down the river in twenty-eight days to Felugiah.

* Jeremiah li. 29. 37.

Here he landed, and proceeded across Irak Arabi to New Babylon (Bagdad). On the way he passed "the old mighty city of Babylon, many old ruins whereof are easily to be seen by daylight, which I John Eldred have often beheld." He notices in particular the Tower of Babel, which he describes as a quarter of a mile in circuit, and about the height of Saint Pauls, "but it showeth much bigger." It was built of very large sun-dried bricks, cemented by courses of "mattes, made of canes, as though they had been laid within one yeere."

Rauwolff, a German traveller, who visited the ruined city in the 16th century, speaks of the remains of an ancient bridge, of the ruins of ancient fortifications, and of the Temple of Belus. "This tower," he adds, "is so much ruined, and so full of venomous animals, that it can only be approached during two months in the winter, when they do not leave their holes."

Another traveller, of the name of Boeventing, distinguishes this tower from another square building of 125 paces in circumference, which he takes to be the Temple of Belus. Texeira, a Portuguese traveller, informs us that in his time there remained very few traces of that once famous city; and that there was no spot in all the country so little visited as that upon which once stood Babylon.

In the year 1616 these ruins were visited by the celebrated traveller Pietro della Valle; and though it is true that he enters more fully into the de-

scription of them than any former traveller, it is still matter of astonishment that he did not give a fuller account of the various heaps which he must have seen. He describes them generally as a confused mass of ruined buildings, so covered over with earth, that they sometimes looked as much like hills as buildings.

A Carmelite monk, on his return overland from India, about the year 1657, left Bussorah in a boat sailing up the Euphrates on the 16th of August;* and though he says but little of Babylon, the account he gives of his voyage up to it is curious, and the book being scarce, a few particulars from his journal are here inserted. They were four days in getting from Bussorah to Koorna, the point of Mesopotamia where the Euphrates and Tigris unite. From thence they sailed up the Euphrates, passing several places, the names of which are either now lost, or so changed by the Italian monk, that they are not recognisable.

After having passed a place he calls Goi, and then moving on to the two Medinas and Mansura, they arrived on the 6th day at Saghé, and the following day they came to *Gezzael*, by which he probably means Ghezzail, or the place of residence of the chief of the Arab tribe of that name, which inhabits the banks of the Euphrates, below Babylon.

He next speaks of reaching the place where

* Viaggio all' Indie Orientali del Padre F. Vincenzo Maria di S. Caterina di Sienna, Procurator Generale de Carmelitani Scalzi.

the Tigris and Euphrates separate, and likewise of arriving at Seleucia, all of which is quite unintelligible. He surely must have perceived that the two rivers divide at Koorna, and the only Seleucia on these rivers is not on the Euphrates, up which he was sailing, but on the Tigris, about twenty-five miles below Bagdad.

He goes on to say—"The heat was insupportable, and for many hours of the day quite stupified us. Though the nights tempered the burning heat, yet we were then greatly molested by musquitoes, which are much larger than those we have in Italy. On the morning of the 24th we arrived at Salussar, in the evening at Marmer, both of them miserable places, composed of huts built with mats and reeds, but abounding in provisions. The following day we arrived at Argé, where the jurisdiction of Bagdad* begins. Here we halted for two days, and our suffering from the heat was so great that some of the passengers fell ill.† The water of the Euphrates is very relaxing, and easily brings on dysentery, the sole remedy for which is burnt wine.

"On the 27th we found ourselves surrounded by an open desert, and the weather was intensely hot. We heard lions, tormented by the heat, roaring on all sides, there being great numbers of them in these woods. Having posted our guards at the coming

* The writer always calls this city by the name of Babylon.

† And they were cured by a strange remedy—an infusion of tobacco in a glass of brandy, which produced a profuse perspiration, and thus relieved them.

on of night, we gathered together a good provision of wood, in order to keep up a brisk fire through the night. But towards midnight our guards having fallen asleep, and the fire having become fainter, one of these wild beasts came so near, that there was not more than twenty paces between us and him, when, by the Divine permission, a Turk awakened, who, as soon as he became aware of the danger, commenced crying out as loud as he could, and such were his screams, that every one was quickly up, and the noise of the fire-arms which at the same time were discharged on all sides, so alarmed the lion, that he quickly took to flight.

“ We were off early in the morning, and soon came to a little wood of wild cypress-trees, among which we heard the whistling of some Arabs, who were making signals to each other to assemble, in order to attack us. We all prepared to meet them ; and soon afterwards about forty men made their appearance on the shore, some armed with lances, some with bows and arrows. Having steered our vessel away from the shore, our people inquired of them what they wanted. They pretended that a cow had been stolen from them ; and, after much disputing and abuse, they retreated. Pursuing our voyage, on the 31st we arrived at Samadava, a very flourishing and well-peopled place, where we halted two days.

“ We resumed our voyage on the 2nd of September, in considerable fear of thieves ; and we passed through a wood full of wild beasts, where often we heard the

roaring of the lions, who from time to time answered one another from the opposite shores of the river, to our no small terror; and yet, notwithstanding, we met with Arabs in these woods, who live upon capers and wild fruit.

“ On the 9th we arrived at a village where the people were celebrating the Coorban Bairam, or the anniversary of the sacrifice of Isaac. After some hours’ repose we set off for Kader and Romaia, which is rather a considerable place. The captain of our vessel had promised us at Bussora to conduct us from Romaia by land to Bagdad, which place we should reach in five days; but, upon our requesting him to provide us with horses, we found it impossible to obtain them. He, however, hired a smaller boat here, in order to hasten our voyage, in which we set off; and having passed Coscus,* we were attacked by some Arabs, who, enraged at having lost some of their cattle who had been devoured by lions, expected to make up for their loss by plundering us; but seeing us all armed, and with little baggage, and knowing that they would, therefore, gain little and might lose much, they thought it most advisable not to meddle with us. Finally, on the 16th of September, we arrived at Hillah, passing along beautiful banks, covered with palm and other fruit-trees, and abounding in the necessaries of life. Here we remained for two days.

“ It is a very general opinion that this place was

* By which he probably means the place called Hasca.

the ancient Babylon, which is proved by the site, being on the banks of Euphrates, by the fertility of the adjacent lands, and by the ruins of magnificent buildings, which abound for many miles round; but, above all, by the remains of the Tower of Babel, which to this day is called Nimrod's Tower. We were curious to see these buildings, but finding that no one would accompany us for fear of robbers, we were compelled to give it up.

“The captain had again promised to provide us with horses at this place, but he put us off again with a thousand excuses. We were in great trouble about it, when hearing, on the evening of the second day, that a caravan of Persians had just arrived from the tomb of Ali, on their way to Bagdad, we provided ourselves with horses, and crossed the river over the bridge of boats with the caravan that night.”

The day after leaving Hillah they arrived in the neighbourhood of Bagdad, and “passed the remains of several remarkable buildings.” They entered the city, and took up their abode with some Capuchin friars, who received them “with their wonted expressions of love and affection,” and treated them with the most unbounded hospitality.

But to return to the history of the remains of Babylon, concerning which the Carmelite monk had it not in his power to give us much information. Another Roman Catholic missionary, le Père Emanuel de St. Albert, at a later period visited the solitary city, and describes the mass of ruins which

had been seen by Pietro della Vallé; besides which he mentions having seen remains of walls built of brick and cemented together with bitumen, some of which were still standing in his time, and others had fallen down. He then goes on to say, "Before reaching Hillah, a hill is visible which has been formed by the ruins of some great building. It may be between two and three miles in circumference. I brought away from it some square bricks, on which were writing in certain unknown characters. Opposite this hill, and distant two leagues, another similar hill is visible, between two reaches of the river at an equal distance." After speaking of Hillah, and of a lake into which the Euphrates enters near that town, he continues as follows: "We went to the opposite hill, which I have already mentioned: this one is in Arabia, about an hour's distance from the Euphrates, and the other is in Mesopotamia, at the same distance from the Euphrates, and both exactly opposite to each other. I found it very like the other, and I brought away some square bricks, which had the same impressions as the first-mentioned ones. I remarked upon this hill a fragment of thick wall, still standing on the summit, which, from a distance, looked like a large tower. A similar mass was lying overturned beside it; and the cement was so solid, that it was quite impossible to detach one brick whole. Both masses seemed as if they had been vitrified, which made me conclude that these ruins

were of the highest antiquity. Many people insist that this latter hill is the remains of the real Babylon; but I know not what they will make of the other, which is opposite, and exactly like this one.* The people of the country related to me a thousand foolish stories about these two mounds; and the Jews call the latter the prison of Nebuchadnezzar."

Niebuhr, who visited this spot in 1765, seems to have no doubt that here Babylon once stood, and mentions that it was still called *Ard Babel*; adding, that hereabouts were evident traces of a once great city. On both sides of the Euphrates, according to him, were mounds or little hills, which, upon digging into, were discovered to be full of bricks.

Between the years 1780 and 1790 the ruins of Babylon were examined by M. de Beauchamp†, who begins his account by saying, "It is in the territory of Hillah, at about eighteen leagues south-west of Bagdad, that are still to be seen the ruins of ancient Babylon, on the banks of the Euphrates; but they chiefly consist of bricks scattered about, with the exception of a very considerable tower, which Europeans take to be the Tower of Babel." In another place he adds—"The ruins of Babylon are very conspicuous about one league to the north of the town of Hillah. Above all the rest is one which is rather

* "It is evident," adds M. de St. Croix, "that the second mound is within the site of Babylon, and the Père Emanuel ought to have had no hesitation on the subject."

† He resided some years at Bagdad, as the Pope's Vicar-General of Babylonia.

flat on the top, of an irregular form, about thirty toises high, and much cut up by furrows down the sides. It would never have been taken for a work of man's, were it not for the regular layers of bricks which are visible, and which prove that it was no natural hill. Beyond this mound, on the banks of the river, are immense masses of building which supplied bricks for the building of Hillah. This place, and the mound called the Tower of Babel, are commonly designated by the Arabs, *Makloubé*, which means overturned."

Besides these ruins, M. de Beauchamp likewise mentions a brick wall, which he judges must have been sixty feet thick. "It ran," he adds, "parallel with the river, and may have been part of the wall of the city. I discovered, also, a subterranean channel, which, instead of being vaulted, was covered with flat stones, three feet broad, by six or seven long. These ruins extend several miles to the north of Hillah, and satisfactorily prove this to have been the site of ancient Babylon."*

In another memoir upon the same subject, M. de Beauchamp adds—"There is no longer any doubt regarding the position of Babylon, which lies just above Hillah. I have explored the site, and I have brought away Babylonian inscriptions. I drew up on the spot an account of what I saw. I do not

* *Mémoire sur les Antiquités Babyloniennes, &c.*, lu à l'Académie des Belles Lettres, et imprimé dans le *Journal des Savans*. Dec., 1790.

agree with M. d'Anville, who divides Babylon by the river Euphrates. I carefully inquired of the Arabs, who have been forty years employed in digging for bricks with which to build houses in Hillah, whether in digging on the other side of the river they found bricks, and they answered no. It is true that, on the other side of the river, at about a league's distance from the banks of the river, there are mounds of ruins, called by the Arabs, *Brouss*. Those of Babylon are exactly under the mound they call Babel. I was told on the spot, that the ruins of Babylon extended three leagues to the north of Mohawil, and as far below Hillah, which would give a length of more than six leagues. There is, therefore, no difficulty about the position of Babylon.”*

* In speaking of the latitude of Babylon, M. de Beauchamp says, “According to M. Niebuhr, the latitude of Hillah is $32^{\circ} 28'$, which would make the distance between Bagdad and Hillah $21\frac{3}{4}$ leagues, allowing 25 to a degree, the meridian being pretty much the same. But Hillah is 5 degrees to the west of Bagdad, according to an observation of longitude taken on the 5th of November, 1789, at Hillah. It therefore appears to me that 22 leagues is rather too much, and that 18 leagues is about the real distance. The result of two expeditions made by me from Bagdad to Hillah is $16\frac{1}{2}$ hours, at a horse's pace,—not at the rate of caravan travelling. M. Niebuhr counts 13 or 14 German miles; and in taking $13\frac{1}{2}$, that would give $22\frac{1}{2}$ leagues, at 25 to a degree. This distance, which is too much, is sufficient to induce me to believe that the latitude of Hillah, according to M. Niebuhr, is too little. I made it to be $32^{\circ} 35'$. I had made it $32^{\circ} 40'$, but I think there must have been some error in my instrument, and that my observation gives as much above, as M. Niebuhr's had given under, the truth. My last observation corresponds better with the distance; so that the latitude of Babylon would be $32^{\circ} 37'$. M. d'Anville has made it less, as well as Niebuhr. The only error I could have made, would have been in my calculation of the hour on a march. But, supposing I granted that a horseman would walk his horse one league an hour, allowing 20 to a degree, it would follow

Not many years after, Babylon was visited by the well-known traveller, Olivier, who thus describes it: "The place where Babylon once stood, at about twenty leagues to the south of Bagdad, presents at first sight no traces of a city; and it must be carefully gone over, before some heaps and mounds are observed; and in order to discover that, in every direction the earth has evidently been dug into. Here the Arabs have for more than twelve centuries been occupied in digging and carrying away the bricks, with which chiefly Coufa, Bagdad, Mesjid, Ali, Mesjid Hussein, Hillah, and almost all the towns in the neighbourhood have been built. But that which, as much as these excavations, contributed to the disappearance of the very remains of Babylon, was the nature of the materials with which it was built. It was situated in a flat plain, the soil of which was composed entirely of earth, without being mixed with any stones, and in a country where wood was always scarce; the inhabitants were therefore obliged in building to have recourse to the earth which was deposited by the rivers; out of this they made bricks, which they baked in the sun, and which they bound together with the reeds that grew ready to their hand. For the same reason they generally employed bitumen in their buildings instead of mortar. It is manifest that a building

that Hillah ought to be at $32^{\circ} 32'$, and Babylon at $32^{\circ} 34'$, which is very near my statement. I may further add, that Babylon is on the eastern, and Hillah on the western, bank of the Euphrates."

composed of bricks baked in the sun would, when destroyed, leave few traces of its existence, but would soon be mingled with the surrounding soil."

"However, notwithstanding the lapse of time, and the Arabs, and the frailty of the materials employed in the buildings, there are still to be seen the remains of very considerable edifices and very thick walls, which the Arabs are demolishing to their very foundations. The most remarkable ruin of all is one which appears to be the remains of the Temple of Belus, that was built by Semiramis. It is a mound of considerable extent, the surface of which is formed of earth, out of which the Arabs dig large baked bricks, cemented with the bitumen I have already mentioned. Between each layer of bricks is a thin bed of reeds and bitumen. In this mound, the form of which seems square, and the circumference between 1100 and 1200 ordinary paces, there has been discovered several openings, which, however, have never been sufficiently cleared to trace them, and discover for what they were intended. This mound is situated at about one league to the north of Hillah, at a quarter of a league from the eastern bank of the Euphrates. Between this mound and the river there are a great many heaps, and many foundations of ancient walls.

"Here it is that, in general, are found the large bricks on which are the inscriptions in unknown characters.

"There are some ruins to be found on the west

side of the Euphrates, where likewise are sometimes found bricks with inscriptions on them ; but I sought in vain for traces of the palace of the kings ; nor could I discover in any direction the ramparts or walls of the city." *

The history of the ruins of Babylon has been thus brought down to near the period when they were visited by Mr. Rich, whose account of them is contained in the following Memoirs. They have since that period been examined and fully described by two very intelligent English travellers, Sir R. K. Porter and Mr. Buckingham, whose travels are too well known to require any further mention here, than to point them out as continuing the subject first undertaken by Mr. Rich.

It may not be uninteresting to the thoughtful reader to conclude this imperfect introduction to Mr. Rich's work, in the words of M. de St. Croix, who winds up his own Memoir on the ruins of Babylon with the following review of her history.

Though the above details are not so complete as could have been desired, they suffice, nevertheless, to prove to us the literal fulfilment of the prophecies of Isaiah and Jeremiah. Let us first observe two things in these prophecies. The first relates to the ancient inhabitants of Babylon : they fully experienced the chastisement with which they had been menaced by God, after the taking of their city by Cyrus ; nor were their descendants better treated by

* Travels in the Ottoman Empire, Syria, and Egypt. By Olivier.

Darius and Xerxes. The second relates to Babylon itself. In order better to understand the application here, we must bring some facts together.

This magnificent city, having fallen into the power of Cyrus 538 before J. C., ceased to be the capital of the empire of the East, and fell under a foreign yoke; and thus was fulfilled the first object of prophecy. As a punishment for her repeated revolts, the outer walls were demolished in 510, under Darius the son of Hystaspes, and thus began that destruction which had been foretold by Isaiah* and Jeremiah.† The carrying off of Bel, and the demolishing of his temple about 481 by Xerxes, and all the outrages to which he subjected the Chaldeans, had equally been foretold by Jeremiah.‡ But the fate of Babylon was not yet decided; it still existed, and with some sort of consideration, for the kings of Persia spent a part of every year there. It was Alexander who gave it the final blow in 325 before J. C.; and once dismantled, it soon fell into decay. The two emigrations, which were occasioned by the invasion of Demetrius and the foundation of the city of Seleucia, during the years 310 and 311, and the third emigration, caused by a Parthian general in 127 before J. C., together with the plague, which completed the depopulation of Babylon in the year 39 after J. C., are the only events preserved to us by the profane writers; but they establish the

* Chap. xxiii. 19.

† Chap. li. 2.

‡ Chap. li. 4-47.

complete and final overthrow of this great and ancient city.

Josephus places this visitation of the plague, to which I have referred, in the reign of Caligula. The Jews and the other inhabitants were obliged to abandon this miserable city, where the insalubrity of the air was kept up by the stagnant waters of the Euphrates. It would seem that the famous embankment, constructed by Queen Nitocris, had been broken down, and the lake which had been formed to receive the overflowings of that river, and which was still to be seen in the time of Trajan, had been entirely filled up. The Babylonians had already been frequently menaced with a similar misfortune, and they had only averted it by a labour and expense which, at the time of this latter visitation, they were no longer in a condition to undertake.

Before the foundation of their city, the whole territory was covered with water ; and it was only by confining the Euphrates to its bed, that the first kings of Babylon succeeded in peopling the province and the capital.

The Persians, by that destructive policy which has been so often pursued by conquerors, placed obstructions in the middle of the Euphrates, in order to hinder its navigation. Alexander spared no trouble to set it free from these impediments, but time was not allowed him to accomplish his undertaking. After his death the whole was neglected, and consequently fell into a worse condition than

before. Several canals of communication with the Tigris, which had been dug above Babylon, so drained the Euphrates, that it ceased to be navigable. This river likewise, occasionally, changing its course during the inundations caused by the melting of the snows, which takes place in the spring, or about the summer solstice, would necessarily cover the ruins through which it flowed, and keep up the surrounding marshes.

It is not to be expected that under the Mahometan yoke any change took place in the face of the country; accordingly we find that these marshes subsisted, even after the caliphs had fixed their residence at Bagdad.

Isaiah had foretold that Babylon should be covered with a marsh, or that it should be lost in an abyss of mud, according to the rendering of the Septuagint, which could only be brought about by the neglect of the canals.

Jeremiah declares that the sea shall come up to Babylon, and shall overwhelm it with its waves.* How was it possible for the sea to come up to that city, which was so far removed from it? He had said before, "I will dry up her sea,"† which Theodoret explains to mean the multitude of her subjects, that is to say, she shall lose them all. It is a metaphorical expression, and, therefore, might we not understand by Babylon covered with waves, the complete abandonment of the city, and its becoming a

* Chap. li. 42.

Chap. li. 36.

desert? Some writers have attempted to solve the difficulty otherwise, from a passage in Alydenus, where we read that anciently the name of sea was given to the waters spread abroad in the neighbourhood of Babylon. If this explanation, which has been adopted by some commentators, and among others by Don Calmet, is thought too conjectural, might it not be as well to take simply the word *sea* here for the Euphrates itself, which served as a port to the ships of all the nations of the East, who were in the habit of trading with the Babylonians? This seems the more probable, as this manner of expression was not unknown in the East, the Egyptians commonly calling the Nile, *bahr*, or *sea*.

These waves which overwhelmed Babylon soon rendered it uninhabitable; and, as Isaiah says,* she became the habitation of wild beasts, and owls, and satyrs. The progressive accomplishment of the prophecies is one means used by God to perpetuate the remembrance of His oracles, and to keep them continually before the minds of men. Nevertheless, that progress is neither hidden nor unfelt—the rod strikes, and from time to time lets itself be seen; and this is principally what we ought to observe as regards Babylon. Her destruction was marked by several epochs; and one of the last of these was when she was sacked by the Parthian general, Hymerus: from that time forward the name of city could no longer be applied to her. “Mine eyes

* Isaiah xiii. 21.

shall behold her," says the Lord to Micah;* "now shall she be trodden down as the mire of the streets." And truly, for a long time nothing was to be seen but fragments of her ruined walls and buildings, in the midst of which she seemed altogether to disappear. Her very position came to be a problem; and it has only been by diligent search that it has again been discovered. With difficulty does the traveller of modern times find out the remains of this Queen of Cities; he turns them over with astonishment and contempt; and seems to triumph over her, in carrying away some fragments of her remains. The whole territory is a desert, caravans no longer passing through it, and commerce being carried on by means of the Tigris, from Bagdad to Bassora.

Thus has everything concurred to accomplish most literally that prophecy of Jeremiah, regarding the final ruin of Babylon—"Her cities are a desolation, a dry land, and a wilderness; a land where no man dwelleth, neither doth any man pass thereby."†

* Micah vii. 10.

† Jeremiah li. 43.

JOURNEY TO BABYLON,

IN

THE YEAR 1811*.

December 9th.—SET out this morning on an expedition to visit the remains of Ancient Babylon, accompanied by Mrs. Rich, Mr. Hine, and some friends. Our escort consisted of my own troop of Hussars, with a galloper gun, a havildar, and twelve sepoy; about seventy baggage-mules, a mehmandar from the Pasha, and a man from the Sheikh of the Jirbah Arabs.

We left our encampment at Gherrara, or rather the opposite bank of the river, at half-past eight in the morning, Bagdad bearing from Gherrara N. 44 W., distant three miles. In order to get into the Hillah road we took a course 50 W., passing over a level country covered with small bushes. The canal of the Naher Malcha was in sight the whole of the morning. We passed over several artificial mounds, called the old bed of the Tigris. In two hours and a half we reached the road that leads from Bagdad to Hillah, after a march of seven miles, according to

* It was from this Journal that the following "Memoirs on the Ruins of Babylon" were composed.

our rate of travelling. Kiahya Khan, which bore N. 12 E., was built by the celebrated Ahmed Kiahya of Bagdad; but being so near the town, it is not much frequented. Our road now lay S. 20 W., over a perfectly level country; and in about half an hour it took the direction of S. 5 W. At noon we arrived at Assad Khan, after a march of three hours and three quarters, or about eleven miles. These khans are built in quadrangular forms, with niches all round them for the accommodation of travellers, and a room or two near the gateway. In the centre of the court is a raised plinth, on which travellers sleep in the summer; and in the best khans there is an inner range of stabling all round the quadrangle. Over the gate is an open room, and there is always a small mud village round the khan. We only halted for a short time, in order to take some refreshment, and then proceeded on our journey. From a mound near Assad Khan the ruin of Aggher Koof, or Nimrod's Tower, bore N. 26 E.*

* *Bagdad, Saturday, January 4th, 1812.*—I went with a party to see Agger Koof, or Nimrod's Tower, as it is vulgarly called, a ruin of very great antiquity, and very much of the same character as those of Babylon. It stands on the west side of the Tigris, about six miles from Bagdad. The general resemblance of it with the Birs Nemroud struck me forcibly. Like that ruin, it has a mound of rubbish on the east side. The mass of the building is of unburnt bricks, mixed up with chopped reeds, and layers of reeds between every fifth or sixth layer of bricks. Fragments of burnt bricks are found in the base, which is *apparently* composed of the decayed bricks and rubbish, together with the dust blown up against it by the high wind. The mass is of an irregular shape, and about half way up it is an aperture, apparently of no great extent. Square holes are visible in the sides, as at the Birs. The

We left Assad Khan at half-past twelve, and, after riding about three miles, our road bore S. 10 W., and Tauk Kesra became visible from a small eminence, bearing due east. We crossed the Naher Malcha, which was now dry, eight and a half miles further on. A little to the left of the road, on a high part of the bank, I observed a small ruin, which was visible from a great distance, called Sheikh Shooabar.

At three o'clock we came to a khan called Bironoos, from whence Tauk Kesra bore N. 66 E., our road to Iskenderia, a khan where we proposed halting for the night, being due south. About ten minutes to four we came to where the Musseib and Hillah roads join. Musseib is on the Euphrates, where there is a bridge on the road from Bagdad to Kerbela. Another khan was in sight on the Musseib road, called Mizrakjee Oghlou Khan, bearing S. 67 W. All this plain is covered with artificial

cement must have been mere mud: scarcely any is visible. The height of the ruin is 126 feet; the diameter of the largest and middle of it is 100 feet: the circumference of that part above the rubbish is 300 feet; the visible remains of the tower contain 100,000 cubic feet (Ives, p. 298). The lands or morasses about Nimrod produce annually, in corn, to the value of 50,000 or 60,000 piastres. They were once rented of government by Selim Aga, for the term of six years, for 18,000 piastres, which was nothing like their value.

April 17th, 1818.—The superfluous water of the Haour, or Morass of Nimrod, is received by the Masoudi canal, and carried into the Tigris below Bagdad. The dam of the Haour is now broken by the great press of the waters of the Euphrates, which is at present very high; and the water will cover all the country, and run into the Tigris on the Kazemeen road, between the village of that name and Bagdad.—*From Mr. Rich's Note-book.*

mounds, and, probably, at some very remote period there was a town here.

We arrived at Iskenderia at a quarter past five, after a march of about fifteen miles. It is a large and handsome khan, built by Mahommed Hussein Khan, the present minister to the king of Persia, near the old one, which is now quite deserted. The bricks of which this new khan was built were dug up on the spot.

December 10th.—We left Iskenderia at ten minutes before eight in the morning: soon after leaving which, we observed the remains of an old canal, running in a slanting direction with the road, at about two miles distance*. At half-past ten, being two hours and twenty minutes, or about seven miles and a half from Iskenderia, we arrived at a very indifferent khan, called Hajee Suleiman, from the name of the person who built it.

We met here with a large caravan of camels loaded with rice, and going to Bagdad. I have often observed that camels have a very disagreeable smell, and that horses are naturally afraid of them. I mention this circumstance because some persons have asserted that camels have no smell, except when

* After a march of an hour and ten minutes I took the following sights:

Hajee Suleiman Khan bore S. 5 W.;

Musseib, on the banks of the Euphrates, was in sight, at an angle of 60°, bearing S. 80 W.;

Iskenderia bore N. 10 W.;

The village of Naseria, S. 60 W.

smear'd over with pitch or naphtha, after the casting of their coats. My own observations in this respect confirm the assertion of the old historians.

Hajee Suleiman Khan is distinguished from the surrounding mounds by a pillar over the gateway, which at a distance presents exactly the figure of a man. Near this khan there is a canal called Naher al Naseria, in which was water, and it had a bridge over it. I understand that many of the canals by which this country is intersected are full of water in the spring, when the Euphrates is at its height. The direction of our road was now 38 W.

About noon we reached Khan Mohawil, which is also a bad khan, and where we only halted for three-quarters of an hour, in order to take some refreshment. From this spot the grand mound among the ruins of Babylon was visible, bearing S. 5 E.*

Close to Mohawil was a canal, over which was a bridge. Soon after passing Mohawil, the country assumed the appearance of a morass; and, indeed, though it is now dry, I was informed that it was occasionally and partially covered with water. Several artificial mounds were in sight in different directions; especially the grand mound commonly supposed to be the Tower of Belus. Beauchamp calls this ruin Makloube: but the inhabitants term it Mukelibè; or, according to the vulgar Arab pronunciation, Mujelibè, or overturned. Beauchamp in his description does not convey a correct idea of

* Musseib bore N. 15 W.; Naseria, N. 20 W.

its grandeur ; but its appearance is very deceiving, from its great extent of base and perfectly level outline. At the top a person might conjecture it to be a comparatively insignificant mass. I rode to it, and my companions went up on horseback ; but before I had proceeded far up, my head grew completely giddy, and I was obliged, on this occasion at least, to give up the attempt. Great furrows are visible on its sides, and the whole surface, which is earth, is covered with broken pans and bricks, some of which have writing on them. Several deep holes or caverns were visible on the sides, near the top, and the angles present an appearance something like towers or bastions. The view from this interesting mound was very extensive.

Near Hillah I was met by a deputation from the Governor, who excused himself from not having come out in person to meet me, on the plea of sickness. He sent his band of double drums and zoornas, or Turkish hautboys ; and we proceeded through immense crowds of people to the town, where we arrived at four o'clock. The whole distance from Iskenderia to Hillah may be computed at about twenty-five miles. We took up our quarters in the house appointed for us by the Pasha of Bagdad, which was built by the late Ali Pasha for his own use.

December 11th.—I was visited early in the morning by the Governor. I inquired of him if there was any place in the vicinity of Hillah called Broussa or

Bursa; but he was entirely ignorant of any such place, as indeed was every one else of whom I inquired; but he promised to make inquiries. Two bricks were brought to me with inscriptions: one of them was perfect, and had bitumen* on the back of it. The stamp was a long, narrow strip, different from those commonly found.

December 12th.—The Governor again called on me, and he brought me answers to all the questions I had proposed to him yesterday. He told me that below a place called Nebbi Eyoub there is a canal called Jazeria, close to which are two artificial mounds called Mokhalat and Adouar; and that to the west of the Birs Nemroud is an artificial mound called Towereij; besides which, four hours distant from Hillah, on the same bank of the river, but not close to it, he said there was a village called Jerbouia, and that near it is a place called *Boursa*, where are vestiges of ancient buildings, similar to those found at Babylon.

After he left me, I embarked in one of his boats, and tracked a little way up the river, while my people measured the eastern bank. I afterwards landed, and mounted my horse at the termination of the gardens which immediately surround the town. I rode up the river, along its banks, and through a village called Jumjuma. I observed on the opposite bank of the river artificial mounds, which are called Anana,

* I was not able to hear of any bitumen ever having been found in the vicinity of Hillah.

and which, the natives told me, were the remains of an ancient town; but they could tell me nothing further. A little to the east I remarked a very great range of mounds, on which was a small mosque called Amran Ibn Ali, who, they pretended, was killed in this place. Here a man came up to me, of whom I purchased a large black stone, with figures and inscriptions on it*, of which I hope to give a fuller description elsewhere. I could not persuade him to tell me the exact place where he found this antique. These mounds were composed of loose earth, into which the horses' feet sunk sometimes knee-deep, and the surface, which exhibited a great deal of nitre, was covered with potsherds and pieces of brick. The rain had worn deep furrows, and the excavations were great, the people of the neighbourhood continually digging very deep in them, to find bricks for building, a great many of which have writing on them. After descending these mounds, we passed a winding road or ravine, about as broad as the Euphrates, and we came to another range, higher than the last in some places, where the people had excavated to the depth of more than ten feet. I saw evident vestiges of walls, composed of large bricks, which had all bitumen on the backs of them, and were placed on layers of mortar also. I observed no unburnt bricks or reeds. The mortar has become nearly as hard as the brick itself, and seems the same

* Now in the British Museum.—ED.

as is used in the present day, which is called *Noora* or *Jos*. I found here written bricks. I am of opinion that the written bricks must have been laid with their faces outwards, as I never saw any with the smallest vestige of bitumen or cement of any kind on the face where the writing was. On this same range of mounds are deep ravines, or hollow ways, more than twenty feet deep. There are excavations made by those who dig for bricks, in all of which are vestiges of walls. Near there I saw the half of a large jar; the other half had been broken in digging. This jar was fixed in the wall, and near it were several bones, which easily pulverised between the fingers. Not far from this, I came to an excavation more than thirty feet deep, at the foundation of which was a canal full of water, over which was a floor laid of cement. This canal, which runs between the walls, was so deep that they say a horseman might ride through it. A little further on, on the same ravine, the walls on each side are extremely distinct: the face of the one on the south, or right hand, was clean and perfect, and between the layers was much mud. One of the bricks had writing on its external edge, they being here laid flat. The wall itself was extremely thick, the inner side of it not being visible, but buried in the rubbish. I think it could only have had a facing of the fine brick, as, near the top, it rises clear of the rubbish, and is only the thickness of one brick; and wherever it has been bored, the inside bricks are found to be infinitely smaller, and of

an inferior quality to the exterior facing; but I did not meet with bricks merely dried in the sun. Great numbers of written bricks are found here. The height of these mounds greatly deceive one; from their immense extent, and gradual descent into the level plain, appearing much lower than they really are.

I met here with a man who had been sent from Bagdad, in order to superintend the repairs of the fortifications of Hillah; he had a number of Arabs at work digging out bricks, who were of great use to me in directing me to the most perfect vestiges of building. They took me to a place called the Kasr, or, according to their pronounciation, *Gusr*, or the Palace; in going to which we observed a continuation of the wall above mentioned, but without the external facing of fine brick—the cement appeared perfectly white. To the north is an old tree of greater apparent girth than any found in this country, and of which only the external surface of one side remains, and yet it is perfectly fresh and vigorous. The people told me they believed it had been there ever since the time of ancient Babylon—it seems a kind of *Salix*. Upon the opposite side I observed a great number of willows. About a hundred yards from the tree, which lies in the direction of N.N.E. from it, is the remarkable ruin called the Kasr or Palace—the parts which remain are as clean and perfect as if they had been just built. It corresponds exactly with the four points of the

compass, and is filled with rubbish in the inside nearly to the top: all about it are walls, which appear as if they had been overthrown by an earthquake. There are several hollows in it, called by the natives *serdaub*, or cellars, in which several people have been killed. An Arab standing by told me that his father and brother were buried in the ruins there, in digging for bricks, and that he very narrowly escaped the same fate. I took drawings of these ruins, and while I was doing this, the Arabs were talking among themselves about my hussars, and wishing they had ten thousand of them to destroy the Wahabbees. The building here was exactly of the same description as those above mentioned, but so compact that the Arabs had left off digging in it, on account of the great trouble in detaching the bricks. The circumstance of mortar having been used in these buildings is a curious one—though probably the great quantity of nitre found in these mounds is a proof that it was very generally used. There must, however, of course, have been buildings of different ages in Babylon. It is far from being improbable that the *noora* or *jos* was discovered by the Babylonians, as soon as the bitumen, since the desert abounds with it.

December 13th.—I called upon the Governor, who informed me of several antiques having been found in the vicinity of Bedra Jessan, of which he was formerly Governor. One of his men told me that at a place thirty-five hours down the river on this

side* is a mound very nearly as large as the Mujelibè, where a *hat* was found in the time of Ali Pasha of solid gold, and a goose and some goslings of pure gold likewise. Ali Pasha, as soon as he heard of this discovery, sent after the treasure, but which the Arabs would not give up. The Governor spoke of a *serdaub*, as he called it, in the Mujelibè into which he and several men had attempted to penetrate, but as soon as they had proceeded a little way into the cave their lights were extinguished, as they said, by an invisible being. I explained to him the natural cause of this, and requested he would send a man to point out the spot to me. He sent one of his tchoadars, and I proceeded to the canal I discovered yesterday—it runs to the south. Moore† went into it with lights, and found it high enough for a man to stand upright in: each side of it is walled, and it is covered where the superstructure of earth and rubbish has been cleared away, with a large thick white stone of a soft nature, which I had yesterday taken for indurated cement. I observed here some parts of the wall cemented with bitumen, and others with mortar, but not both together. I found three kinds of cement—one bitumen or *zift*, one mortar, just as it is used at present—and the third a reddish substance, probably mortar in a different state. This canal seemingly passes under a street which extends for a considerable way north and south—and the

* That is on the west side.

† An English servant of Mr. Rich's.

walls of which are very high and built with baked brick and mortar. They are discernible for a considerable distance, and run parallel to each other, the space or street between being about fifteen feet wide. I am of opinion that a great part of these structures were built in the manner used at present in these parts, viz., a quantity of small bricks, earth and rubbish were rammed down in the centre, and built round with bricks. At one part I saw something like a door, but it was filled up with rubbish.

We next went to the tree which the Arabs call *Athelè*, and they maintain that it was a Babylonian tree, left on purpose for Imam Ali to tie his horse to. Near the *Kasr* we found a range of unburnt bricks. The *Kasr* is about two hundred yards from the street or passage. I here corrected the sketch I made yesterday, and then rode to the village of *Mujelibè*, which is situated in a flat to the north—and surrounded by gardens. All this part of the plain is traversed by canals of different ages, one of which they were just forming, and near it was a plantation of cotton. We crossed over these canals and came to the great mound, called by *Beauchamp Makloube*, and by the natives *Mukelibè* or *Mujelibè*, or *Babel*. This is by far the greatest mass of the whole, and stands insulated. A canal called *Neel* runs near it to the south, and on the north is a further appearance of ruins. This mound faces nearly to the four cardinal points—the west face is the most perfect in regard to building—there appears

near the top a wall running nearly round it, with some interruptions, and deep ravines or furrows, some of which lead almost into the heart of this great pile. The whole of the buildings here are composed of unburnt bricks, which are mixed up with reeds or straw—with a layer of reeds between each layer of bricks. I brought off a specimen of these.

In ascending from this point, we found the den of a wild beast, where we perceived a strong smell like that of a lion, and found in it some bones of animals. The whole extent of the top consists of a confusion of smaller mounds and heaps, intersected by furrows worn by the rains, and covered with pieces of broken bricks, both burnt and unburnt—pieces of pottery—fragments of bitumen—pieces of glass, and mother of pearl, &c. The rest is earth composed most probably of the decomposed unburnt bricks. On the northern side, which is the steepest, near the top, is a large aperture, which on entering it, branches off into three passages. Moore went into these with lights, and found the passages above twice the height of a man, and the top was flat. This apparently was a part of the original structure, and not an excavation. This is the place the Governor mentioned as the enchanted serdaub. Near the bottom of it, bitumen was perfectly observable between the bricks, which were unburnt, and reeds also between every layer. The beginning of the passage is no more than three feet high—this winds

very much. The corners of this mound appear to have been crowned with turrets. The opposite side of the river is quite flat, without the smallest appearance of ruins. Musseib was visible in the horizon, as was the Towareij, a mound to the N.W., and the Birs Nemroud to the S.W. At the foot of this mound, between seventy and a hundred yards from it, to the north and east, are vestiges of buildings. This mound is exactly 550 yards from the river, by actual measurement. I took sketches of the four faces of it.

On the mound on the bank of the river, near the village of Jumjuma, some of our party discovered fragments of urns with human bones, at the depth of forty feet below the surface, close to the river.

We took some refreshments on the great mound we had been exploring, and then rode from it towards the south-east, where we found a large mound of loose earth, and fragments of bricks. This must have been a considerable structure, and yet it is certain, having been dug into in various directions, that it was composed of no other materials. It might have been cased with materials of a superior nature. Near this are the smaller mounds, and on the west a large open space between this and the grand mounds of Amran Ibn Ali and the Kasr, which was very much impregnated with nitre. A few yards to the eastward of this, running nearly north and south, with a trifling variation to the east, is a long mound of no considerable height, but con-

tinued for a great way to the south, which might be taken for the wall. We came to an opening in it where the mound on the south side was much larger than the general range, and might possibly have been a gate. We came to a still larger mound which crossed the other at right angles, and after running a considerable way to the east, extended to the north at a great distance, forming a square. This appeared to be still more like what one would imagine must be the remains of the walls. There appear to be no remains of any consequence on the western bank of the river, except the Birs Nemroud, which is at too great a distance to come under consideration at present. If this be the case, the smaller mound, which we took for the wall, would give too small an area for the city—for in that case the river must formerly have had a different channel, as we know it ran nearly through the centre of the city—this is far from being improbable. We observed several places where the river had altered its original bed several hundred feet. But the large range of ruins even would be too small—and then the termination or southern wall of the city would be a great way above Hillah. Some traces of the walls certainly must be preserved, as they were used as an enclosure so late as the time of the Parthian monarchs.

The present remains of Babel, as the natives call these ruins, are as follow: first, on leaving the gardens of Hillah you come to the first range, on the

side of which is the tomb of Amran Ibn Ali, under which is the village of Jumjuma, to the south-east. A ravine or rather road is on the west—and, on the west of that, on the bank of the river, is another eminence about forty feet above the river, where the urns and bones were found—to the north is a plain, on the north of which is a still greater range of mounds or ruins, in which is the tree, the canal and street, and the Kasr: descending from this to the north you come to another plain, which extends to the north and east—there are gardens near it, and a small village close to the banks of the river. Towards the north-east is the village of Mujelibè, which is surrounded with a wall—you then come to the canals* above mentioned, and then to the north to the grand mound called Babel, or Mujelibè, by the natives, and noticed by Pietro della Valle, Beauchamp, and others. Further on to the north there are no more ruins.

The first range of mounds, those of Amran, are of soft mould, with fragments of bricks.

The second is dug into in every direction for bricks. Between these and the Mujelibè are low mounds, which may have been private houses.

December 14th.—We went again to the canal, where a number of men were at work digging for bricks, who had left off working yesterday on account of its being Friday.

I observed a range of ruins extending all along

* Called by the natives Naher, or Arki.

the bank of the river, which has evidently changed its course, in some parts having encroached, as in a burying-ground, and in others having left its channel. At the canal I took particular notice how they procured the bricks. They were all burnt ones, and had all writing on them. *The face which had the inscription on it was always placed downwards*—the cement on the right hand or southern side was bitumen. It is curious that the bitumen does not adhere to the lower or written face, but invariably to the upper. The people say that *noora* or lime has been strewn over the bitumen to prevent its sticking to the writing—and yet to what purpose preserve that, which was placed in such a manner that it could never be read? If these bricks had been taken from some still older building, they would not have taken care to place them all regularly with their faces down. I scraped off the bitumen from the upper sides of a great number of bricks, but found no writing on them. I had a great quantity of bricks pulled out of the wall in my presence, and found them all answering the above description, without any variation. The only instance I ever saw of any inscription being found on any other than the lower face of the bricks, was one on the edge of a brick, in the part of the wall which is most perfect. I am of opinion that all the burnt bricks were inscribed—some of the inscriptions are contained within a long narrow frame, others in one perfectly square—always with a margin round. The clay or unburnt

bricks appear to be of greater dimensions than those which are burned.

The wall which is at the termination of the street, appears to have crossed it at right angles, and to have been connected with the Kasr. In the plain, between this and the north, are small eminences, apparently composed of inferior buildings. To the east is a large circular space, which apparently had never any building on it, and is covered with tussocks of rank grass, as if water had covered it. The greatest part of the plain and smaller eminences are very rich in nitre, which in some places looks as white as if the ground had been covered by a recent fall of snow.

I am informed that in January the river is high, and then a great part of this plain is overflowed, which renders many of the ruins inaccessible. The opposite side of the river has a very verdant marshy appearance, and I observed a great number of willows*, some of which had attained a great size.

On the right or east of the plain just mentioned is a range of mounds, and the great mound of rubbish we visited yesterday. We rode on to the Mujelibè or grand mound.

I observe as a singular circumstance in this part of the country, that there are several old canals with more recent ones running parallel and close to them.

* "By the rivers of Babylon there we sat down; yea, we wept, when we remembered Zion. We hanged our harps upon *the willows* in the midst thereof," &c. Ps. 137.

It appears extraordinary that instead of digging a new canal they do not repair that which is found ready to their hand. The canal called Neel is an instance of this. There is an old one, and a more modern one, close to it.

I went with ten men with pickaxes and shovels to make experiments on the Mujelibè; they dug into the heaps on the top, and found layers of burnt bricks, with inscriptions laid in mortar. A kind of parapet of unburnt bricks appears to have surrounded the whole. On the western face the mud bricks were not only laid on reeds, but mixed up with them. In the northern face, where a part is also still standing, the bricks are not mixed up with reeds, but only laid on layers of them; here I found some beams of the date tree, specimens of which I brought away. The part of the mud wall standing on the west front is not thick; that on the northern side is more so, but none of them are of any considerable thickness. On the north front, the height of the whole pile to the top of the parapet is 132 feet. The south-east angle is higher. I dug into several other parts of the top, and found only earth and rubbish. In one hole I found some quills of a porcupine, which animal the natives eat. The tchoadar who accompanied me yesterday, came with us again to-day. He told me that in the desert to the west animals are found, the upper part of which resembles perfectly a man, and the lower parts a sheep—that the Arabs hunt them with greyhounds, and that

when they find themselves close pressed, they utter miserable cries, entreating for mercy—but that the hunters kill them, and eat their lower parts. The tchoadar had evidently not the slightest doubt of the truth of his wonderful story.

I set my men to work exactly over the passage called the Serdaub, with the hopes of laying as much of it open as might lead to a probable conjecture what it was originally destined for. In the Serdaub, about four years ago, they found a great number of marble fragments, and immediately afterwards a body enclosed in a case or coffin of mulberry wood, completely dressed. I conversed with a person who saw it—he was a respectable man from Bagdad, and appeared not deficient in intelligence—he told me it had on boots which were black and reached above the knees, that the dress was a tight or short one—that on getting it out, it separated into two pieces, and that soon after exposure to the air, both the body and the coffin crumbled into dust. I found a small point or spike of brass wrought with some care. I left my people at work, as they here will have enough to employ them for several days. I observed from the top of this mound the range which we yesterday took for the city wall, I mean the outer and large one. It had clearly the appearance from this height of a boundary—its course was to the south-east; and it must have come close to, or joined, this tower, beyond which no traces of it are visible.

December 15th.—I rode out to the ruins, but more in the direction of the river. The ruins com-

mence about one mile and a half above Hillah, near which place there are none on this side of the river. The southern boundary of the ruins is a large flat mound, running on the right hand in the direction of north-east and by east, and on the left it makes a sweep to the north-west. On it are two very small walls standing, evidently belonging to a comparatively modern building.

Continuing your course to the left or north-west, you come to the banks of the river, along which there is a range of mounds or ruins, which increase in height as you advance to the north. When they are about the parallel of the Kasr they rise to the height of forty feet; the front towards the river is abrupt, and at the bottom of it, close to the water's edge, which washes its foot, are found the urns filled with human bones. These are fixed in the wall, which is of burnt bricks, cemented with bitumen. Just above, this mound still continues its course, though not of so great a height, in a direct line to the north or north-west; but the river has deserted its bed evidently, there being a plain of above two hundred yards' breadth between the foot of the mound and the river, which takes a bend nearly east and west. This mound loses itself a little before you come to the canal called Neel. Another canal runs through the plain, at the foot of the Mujelibè, in a slanting direction to the south-east. Between this range of ruins on the banks of the river, and the grand central heaps, runs a broad valley, white with nitre, and covered with tussocks of rank grass. The two

grand heaps, namely those of Amran and the Kasr, appear to join, or nearly so, on this side. Below the old tree, in the same mound, I discovered another of a different species, but seemingly of great age, though not so much so as the other. The canal so often mentioned is full of rain water impregnated with nitre. The bricks of the Kasr are much whiter than any found elsewhere, and have no inscriptions on them. In this mound pieces of varnished bricks are found in great abundance. Moore made out the measurement of this height from the top of the mound to the bottom of the foundation, thirty-eight feet; breadth of the street thirty-four feet. The stones which cover the canal are several yards in breadth, and about a yard thick: they are so heavy that the brick-work by which they are supported is bent in on each side. At the Mujelibè I discovered the entrance to another passage on the left hand side of the great furrow or chasm on the western face. The men at work on the top of the north-west angle of the mound had penetrated about ten feet deep. They had come to a quadrangular funnel about thirteen feet square, the sides of which were of burnt brick and bitumen; the centre had been filled with dust or dirt, probably unburnt bricks which had decayed. They turned up several earthen pots, one of which had the remains of a fine white varnish on the outside. We found on the top of the mound several shells, a few bits of glass and mother-of-pearl, also several bricks which had been so much

burnt that they had vitrified in some parts. The river near this runs north-west and south-east to its angle, about the parallel of the village of Mujelibè, and termination of the ruins on its banks. In an easterly direction from the Mujelibè is a mound called El Hheimar—it is of a pyramidal shape, and is about four hours off. In the west we observed a village called Talmasia, in the direction of the Birs Nemroud. At the foot of the mound where the urns were found, I discovered in the water bricks and other vestiges of building, a sure sign that the river has encroached here. The side of this ridge towards the land slopes down into the plain that separates it from the grand mounds. In the excavations my people are making in the Mujelibè, another beam of date tree has been found.

December 16th.—The Seraff Bashi* (a Jew) of the place came to see me. I asked him what the Jews call the prison of Nebuchadnezzar—he said, it was the Birs. He had never been at the Birs himself. The Jews have a small synagogue here. There are no Christians.

The Governor called again this morning. I afterwards took a ride among the gardens, to see if there were any remains of building thereabouts, as mentioned by some travellers. I went first to the Mesjid-el-Shems, where they say the sun delayed his course on purpose to oblige Ali. The Mosque itself is small, and contains nothing worthy of observation.

* The head, or government banker.

It has a dome and a spire in shape resembling a pine apple, similar to the one at the tomb of Zobeide, the celebrated wife of Haroun al Raschid, and Sheikh Shehab-ud-deen of Bagdad. On the top of the spire of the Mesjid-el-Shems was a mud cap on a pole, not unlike the cap of liberty. They pretend to say that this turns with the sun. From this I penetrated among the gardens of the western side of Hillah in every direction, and by the most unfrequented paths, but saw nothing resembling the remains of any ancient building. Indeed it stands to sense that there can be nothing of this nature among the gardens. They could not cultivate such heaps of ruins as those of Mujelibè, and any inferior mound simply composed of earth, they would certainly have levelled. I do not understand M. Otter's expression, that the site of Babylon is generally covered with wood, and that most of the ruins are concealed in *coppices*. There are no vestiges of wood near this plain except the gardens on the banks of the river, and those belonging immediately to the town. At all events, *coppice* was a wrong word to make use of, and we must probably attribute this to the faultiness of the translation.

I rode partly round the town walls ; they are very miserable, composed chiefly of mud, with here and there a semicircular tower repaired with bricks. Near the Tahmasia gate they were repairing the walls, or rather making men work with fine square bricks brought from the Kasr. There is a small

ditch round the town. The gardens are very extensive. The Euphrates is now rising, but it will fall again shortly, and rise in the spring, when it will continue longer at its height than the Tigris does, and will overflow the low parts of the surrounding plain, including the valleys among the ruins.

December 17th.—Last night the men whom I had employed to dig into the grand mound came and informed me they had discovered a skeleton in a coffin. They brought me a specimen of the bones and of the coffin. The bones were astonishingly sound. They brought me also a brass bird, which, from being hollow on the other side, seems to have been fixed to the coffin as an ornament; besides this was another brass ornament, which must have been suspended to something; and a round stone which they found under the head of the coffin. I resolved to go and examine the place this morning, and likewise retouch some of my sketches. We accordingly set off after breakfast, but the day was too boisterous and dusty, the wind being southerly, to attempt drawing. I therefore rode directly to the great mound, and found that my workmen had opened a passage down into the Serdaub. We descended with a mashall or flambeau, and found some narrow low windings—those that were most perfect were flat roofed. Two kinds of bricks are found here, burnt and unburnt, with layers of straw, and also bitumen; the burnt bricks being laid in the latter. These cells or pas-

sages are so ruinous that it is impossible to say what could have been their original design. Fronting the place where we descended, at about the height of eight feet from the bottom, in the wall, was the coffin the men had discovered. I stood by and observed them by the light of the mashall, while they dug it out, standing on a ladder. They could only pull it out piece by piece; sometimes the bones came out with occasionally pieces of the coffin. I could not find the skull, nor collect a perfect skeleton. In digging a little further we found the bones of a young child. These with the bodies found before seem to prove this place to have been a cemetery. The person whom I employed assured me that the black boots mentioned above were nothing more than bitumen. On the top of the mound I observed burnt bricks, not perfect in shape, laid in layers of mortar.

From the place whence they dug out the bones they pulled out several fine burnt bricks, perfect in shape, some of which had writing on them, and bitumen adhering to the other side. In my ride home over the mound of the Kasr, I heard of a large statue which had been found some time ago, but had been covered up again. I immediately took steps to procure it, and hope to be in possession of it to-morrow.

I sent Moore to measure the river; he found it to be 75 fathoms broad at Hillah, $2\frac{1}{2}$ in depth; and the

current $2\frac{1}{2}$ knots per hour. It is at present rising. In the spring, when it is at its height, it probably runs a knot more, and when low, half a knot less. The number of boats of which the bridge at Hillah is composed, is thirty-two. When the river is low they diminish, when at its height they add to this number.

December 18th.—Went to see the Governor, and afterwards rode out to the mounds of Amran Ibn Ali, to retouch my sketches, which I had not been able to do yesterday. I entered the little mosque, and found a court-yard, at one end of which was a dome. The tomb of Amran, who was a son of Ali's, and killed in a battle near this place, is under the dome, but below the surface of the earth; you descend to it by a flight of twenty-two steps. The body is in a kind of niche, or rather chamber, in the wall, and is enclosed in a wooden chest, part of which is visible through the wooden grating that covers the door of the niche, which is not above two feet and a half high above the ground. To the balustrade are tied various small pieces of silk and cord. I inquired the meaning of this, and was informed that people are in the habit of coming to make requests of the Saint, upon which occasion they tie a piece of string to the balustrade of his tomb, and when they have succeeded according to their desire, they come and remove the string, bringing a small present to the keeper of the tomb. On the right hand, in the same chamber, is

a large tomb of stones, under which are said to lie the bodies of seven of Amran's comrades, who were all slain on the same occasion.

They believe that Ali himself built this structure. The keeper told me that his father wished to make some alterations in the dome, but that Ali had appeared to him in a vision, and desired him not to meddle with what he had himself constructed. I rode to the highest part of this mound and completed my sketches.

Although I was pretty certain from the view which I had of the other bank of the river, that there could be no ruins on it, I was determined to inspect it more narrowly myself. I therefore returned home, and thence rode through the gardens on the west side of the Euphrates, and came to the Mesjid i Shems, which is situated among the gardens of the town, on the outside of the walls. I went into it, and found it supported by very thick and short pillars, about ten or twelve feet in girth, from which sprung arches exactly in the Gothic manner. I was exceedingly struck by the resemblance. I saw a tomb railed in with wood, which they told me was the tomb of Joshua !!! Quitting the Mesjid i Shems, we rode out along the banks of the river. The country is perfectly level, except where intersected by canals, which it is in a very surprising manner. These might very easily deceive the unpractised eye into the belief that they were vestiges of walls or buildings. Here and there the gardens extend along

the banks of the river at intervals, into almost all of which we went in search of ruins. There were also several miserable-looking Arab villages. We examined the whole of this side of the river in the most minute and particular manner; and except nearly opposite the village of Jumjuma, or the Mosque of Amran, we could discern nothing that bore the most remote resemblance to remains of building. There was a mound or two of no height or extent, one of which ran nearly parallel to the mounds of Amran for about ninety or a hundred yards. Every other eminence on minute inspection turned out to be a canal. I took a drawing of the elevation of the mounds of Amran, comprehending the remarkable embankment of the river; and we afterwards returned back, being satisfied that there never could have been a town, or at least any remarkable buildings, on the west bank of the river.* I found to-day that I had been mistaken in supposing the trees I had seen on this bank, from the opposite one, to be willows; there were none visible. This, however, proves nothing. There is a low spit of land left by the river Tigris, near my camp at Gherrara, in the neighbourhood of Bagdad, which last year was covered with willows, but this year there was not a vestige of them remaining.

December 19th.—To day we made an excursion to see the Birs Nemroud. We went out of the town at

* The rise of the river to-day has been twelve feet.

the Mesjid Ali gate (Bab-ul Mesjid), on the inside of which the Pasha of Bagdad has begun building a new wall to the town, of bricks dug up from the Kasr; and it seems constructed on a much better plan than the old one.

The morning was at first stormy, and threatened rain, but it afterwards cleared up. On our right we had the village of Tahmasia, embosomed in a grove of date-trees. It is a small village, said to have been built by Shah Tahmas.

We arrived at the Birse about half-past eleven. There are vestiges of mounds all round it to a considerable extent, and the country is also traversed by canals in every direction. The soil round the Birse was sandy. To the north of it runs a canal called Hindia, dug for the use of Mesjid Ali, by order, and at the expense of, Shujah ud Doulah. Close to the Birse, or at about a hundred yards from it, and parallel to its southern front, is a high mound, almost equal in size to that of the Kasr. On the top of it are two koubbehs, or places of prayer. The one is called Ibrahim Khalil, where they show his burial-place, which is under ground, exactly in the style of Amran Ibn Ali. The natives tell you that it was here that Abraham was thrown into the fire by Nimrod. This tomb has been lately repaired. Close to it is a ruin called Mekam Saheb Zeman, which appears to relate to Meh'hdy; but what particular or circumstance it was destined to celebrate, I was not able to learn. Under this, in the side of the mound,

is an excavation which they call the Serdaub. It is not remarkable. I searched here for the inscriptions mentioned by Niebuhr, but found no traces of them. Sahab Zeman appears to have been that kind of pine-apple spire I have before alluded to ; but only a piece or two of it now remains.

As we had very little time to spare, we divided our work. Mr. Lockett, with my Englishmen, fell to measuring, and I to take sketches.

The Biris is an enormous mound. At the north end it rises ; and there is an immense brick wall, thirty-seven feet in height and twenty-eight in breadth, upon it. This wall is not on the centre of the north summit of the mound, but appears to have formed the southern face of it. The other parts of the summit are covered by huge fragments of brickwork, tumbled confusedly together ; and what is most extraordinary, they are partly converted into a solid, vitrified mass. The layers are in many places perfectly distinguishable ; but the whole of these lumps seem to have undergone the action of fire. Several lumps of the same matter have rolled down, and remain partly on the side of the mound, and partly in the plain. The large wall on the southern face of the summit is built of burnt bricks, with writing on them, and so close together, that no cement is discoverable between the layers. Small square apertures are left, which go quite through the building, and are arranged in a kind of *quincunx* form. Down the face of the wall the bricks have

separated, leaving a large crack. On the side towards the mound of Ibrahim Khalil the mound slopes down from the foot of this, and up nearly half its height, is a flat road running round this part of it, twenty of my paces broad. From this the mound slopes more gradually to the plain, or valley between it and the mound of Ibrahim Khalil, and is worn into deep ravines or furrows, like the Mujelibè.

On the other, or north face of this pile, it slopes down more abruptly, at once into the plain, with only hollows or paths round it, the road before mentioned, which from that part appears to surround the building, losing itself before it reaches this. On the north-west face, where it also slopes at once down into the plain, are vestiges of building in the side, exactly similar in appearance and construction to the wall on the top, with the holes or apertures which are mentioned in the description of that.

At the foot of all is, seemingly, a flat base of greater extent, but very little raised above the level of the plain. The whole sides of this mound are covered with pieces of brick, both burnt and unburnt — bitumen, pebbles, spar, blackstone; the same sand or lime-stone which covers the canal at the Kasr, and even fragments of white marble. No reeds were to be seen in any part of the building, though I saw one or two specimens of burnt bricks which evidently had reeds in their *composition*, and some had the impression of reeds on their cement.

I saw also several bricks which were thickly coated with bitumen on their lower face.

In the lowest part of the mound, opposite Ibrahim Khalil, the mounds are most evidently composed of unburnt bricks, the layers being in a great measure visible. This would lead one to imagine that it was not originally a part of the great pile, were not specimens of this kind of brick found in it also.

The Arabs do not, I believe, dig *so often* for bricks in these mounds as in those on the eastern bank of the Euphrates; seemingly on account of the difficulty of separating them perfect, the inconvenience of land-carriage, and the fear of the Bedouins.

The tribe of the Algheshaum Arabs are at present in this neighbourhood. They are under the government of the Pasha of Bagdad, though, in common with all their countrymen, they are very likely to give annoyance to the traveller. The Sheikh came to pay his respects to me. Other tribes, of a more openly dangerous character, often frequent this neighbourhood, which may account for this ruin never having been accurately described before.

There is a very fine view from the face of the tower and summit of the mound. We saw Kefeel, or the tomb of Ezekiel, and were informed that Mesjid Ali, which is ten hours off, is visible early in the morning.

Bricks are found in every part of this huge pile by

digging. The circumference of the base, not the low one, is 762 yards : the whole height of it, from this measured base to the summit of the tower or wall, is 235 feet ; but there can be no doubt that it was much higher. The form is more oblong than square. I found the longest side to be 248 of my paces.

If this building had been on the other bank of the Euphrates, or nearer the ruins, I should have had no hesitation in calling it the Tower of Belus. It is a most astonishing ruin. I endeavoured to procure some of the bricks perfect, but they were so strongly cemented together, that the workmen I took with me could only break off pieces of them. They had all writing on them.

We set out, on our return, at five minutes before two, and arrived at Hillah about four. The distance between the Birs and Hillah is six miles.

Our escort consisted of my own hussars, sepoy, and galloper-gun, under the care of Tcheyt Sing ; in addition to which the Governor had sent about sixty Arab horsemen, without asking my leave. I inquired of the mehmandar the reason of this. He said that the orders of the Pasha were so particular respecting me, that the Governor did not think himself authorised to break through them ; that he had even at first sent out in addition twenty or thirty kaouklees*, but that these the mehmandar had ordered to retire.

* Officers of government.

“As for these Arabs,” said he, “let them come: should any Arabs start up in the way, they will save us trouble. We will let loose dog against dog!”

The Governor excused himself from not coming out to meet me on my return, on the score of there being my *haram* with me.

I heard this evening that my workmen at the Kasr had uncovered a colossal statue of black stone, and I purpose visiting it to-morrow, on my way back to Bagdad.

December 20th.—Set out on our return home. In my way I rode to the mound of the Kasr, where my men had been at work for the last ten days in clearing away what they call the Idol. To my great disappointment, instead of finding the statue of a man with inscriptions, I found a lion cut out of coarse grey granite, of extraordinary dimensions. It stands on a pedestal, which is nearly buried in the rubbish. It is on the side of a mound, about a hundred yards to the east of the tree and the Kasr, and is fallen from its apparently original position, but does not rest upon the ground, being rather in a reclining position. The rubbish having been cleared from under it, it will probably soon fall entirely. Mr. Lockett remarked having seen several lions, seemingly of the same kind of workmanship, in Persia, especially at Shapour, but never of so great a size. I take this to be the idol mentioned by Beauchamp. The workmanship is indifferent. In the mouth is a

circular aperture, into which a man can thrust his fist.

All along the road to Mohawil Khan are vestiges of ruins: in particular I observed three mounds. Al Hheimar is three hours from Mohawil, upon the same line. It is a high, conical mound, with bricks like those found at Babylon.

We slept at Iskenderia Khan, all about which, and, indeed, almost all along the road to Bagdad, are vestiges of buildings, mounds, &c.

Heard from my mehmandar of the city mentioned by Niebuhr, called Hatra, between Mousul and Ana. My Englishman (Moore) had been at the place, and saw very considerable ruins, with large pillars of stone; in particular, a high wall, about forty feet, with a ledge on the top, and a row of men's heads sculptured on it.

December 21st.—Left Iskenderia. About half way between Bir-onoos and Assad Khan is a dry canal, over which is a ruined bridge of one arch.

Yesterday a caravan was plundered here by Suleiman Bairak, and his Agalees, about sixty in number. This is a very rare occurrence. The Sheikh of the Zobeide Arabs is responsible for all accidents that occur on the Hillah road.

The country hereabouts is the most flat, barren, and dreary that can possibly be imagined.

Between Assad Khan and Kiahya Khan we met with upwards of one thousand Persians going to Kerbela, for the approaching Bairam. Kiahya Khan

was built by Ahmed Kiahya of Bagdad. He was out late on a hunting-party in this neighbourhood, and was obliged to take shelter for the night in some Arab tents near this spot, which caused him to build this khan. It is a handsome one in appearance, but now much neglected.

We arrived at Bagdad at four o'clock.

MEMOIR
ON
THE RUINS OF BABYLON.

BY

CLAUDIUS JAMES RICH, Esq.,

RESIDENT FOR THE HONOURABLE EAST INDIA COMPANY AT THE COURT OF THE
PASHA OF BAGDAD.





ADVERTISEMENT*.

THE following Memoir was originally published at Vienna, in a Journal entitled *Mines de l'Orient*, conducted by Mr. Hammer, a learned Orientalist of that city, at whose request it was composed. It is now republished, though without any instructions from the author, and without the advantage of his correction, in order partly to satisfy curiosity on an interesting subject, but still more to solicit the counsel of the learned in the prosecution of those inquiries, Geographical and Antiquarian, for which the situation of Bagdad furnishes peculiarly favourable opportunities. This Memoir is viewed by the Author as only the first fruits of imperfect research. It may perhaps be considered with the more indulgence, as it is believed that it is the only account of these memorable ruins hitherto laid before the public by a native of the British Islands.

* Written by the late Right Honourable Sir James Mackintosh.

MEMOIR

ON

THE RUINS OF BABYLON.

THE site of Babylon having never been either thoroughly explored, or accurately described, I beg leave to offer to the Associates of the *Mines de l'Orient* an account of my observations on that celebrated spot, the completion of which has been retarded by frequent interruptions from indisposition and official occupation.

I have frequently had occasion to remark the inadequacy of general descriptions to convey an accurate idea of persons or places. I found this particularly exemplified in the present instance. From the accounts of modern travellers, I had expected to have found on the site of Babylon, more or less, than I actually did. Less, because I could have formed no conception of the prodigious extent of the whole ruins, or of the size, solidity, and perfect state, of some of the parts of them; and more, because I thought that I should have distinguished some traces, however imperfect, of many of the principal struc-

tures of Babylon. I imagined, I should have said: "Here were the walls, and such must have been the extent of the area. There stood the palace, and this most assuredly was the tower of Belus."—I was completely deceived: instead of a few insulated mounds, I found the whole face of the country covered with vestiges of building, in some places consisting of brick walls surprisingly fresh, in others, merely of a vast succession of mounds of rubbish of such indeterminate figures, variety, and extent, as to involve the person who should have formed any theory in inextricable confusion.—This, together with the impossibility, in such a remote situation, of referring to all the authorities I should have consulted, will cause my account of the remains of Babylon to appear very meagre and unsatisfactory. I announce no discovery, I advance no interesting hypothesis; I am sensible that to form anything like a correct judgment, much study and consideration, and frequent visits to the same place, are requisite. As probably more weight may be attached to my opinions from my residence on the spot, and advantages of observation, than they would otherwise be entitled to, I would rather incur the imputation of being an ignorant and superficial observer, than mislead by forming rash decisions upon subjects so difficult to be properly discussed; and I shall therefore confine myself, in the present Memoir, to a plain, minute, and accurate statement of what I actually saw, avoiding all conjectures except where they may

tend to throw light on the description, or be the means of exciting others to inquiry and consideration. I have added a few sketches, illustrative of the principal objects, for which I claim no other merit than that of scrupulous fidelity, having been solicitous to render them accurate representations, rather than good drawings. For the sake of greater intelligibility in my descriptions, I have added a general sketch of the ground, for the measurements of which I am indebted to a gentleman who accompanied me (Mr. Lockett), who superintended that operation whilst I was employed in drawing and exploring. I project other excursions to the same spot to confirm and prosecute my researches; and preparatory to them I solicit the communications and queries of the learned, for my guidance and information.

An inquiry concerning the foundation of Babylon, and the position of its remains, does not enter into my present plan; the latter subject has been already so ably treated by Major Rennell, in his *Geography of Herodotus* (a work to which I have often been under obligations, which I take this opportunity of acknowledging), that I shall consider the site of Babylon as established in the environs of Hillah, and commence my description with an account of the country about that place.

The whole country between Bagdad and Hillah is a perfectly flat and (with the exception of a few spots as you approach the latter place) uncultivated waste. That it was at some former period in a far different

state, is evident from the number of canals by which it is traversed, now dry and neglected, and the quantity of heaps of earth, covered with fragments of brick and broken tiles, which are seen in every direction,—the indisputable traces of former population. At present the only inhabitants of this tract are the Zobeide Arabs, the Sheikh of which tribe is responsible for the security of the road, which is so much frequented that robberies are comparatively seldom heard of. At convenient distances khans or caravanserais are erected for the accommodation of travellers, and to each of them is attached a small village of Fellahs*. The first of these is Kiahya Khan, so called from its founder, Ahmed the Kiahya or minister of Suleiman Pasha: it is about seven miles from Bagdad†, and is rather a handsome building; but, from its vicinity to the town, is now unfrequented. The general direction of the Hillah road is N. and S.—Assad Khan is the next stage, and is distant from Kiahya Khan about five miles; and between four and five miles to the southward of it the road is intersected by the famous Naher Malcha, or *fluvius regius*, the work, it is said, of Nebuchadnezzar; which is now dry, like many others which I forbear mentioning as being of no importance, though as late as the time of the Caliphs it was applied to the purposes

* Arab peasants.

† I have laid down the distance on the Hillah road by computation and not actual measurement, taking the ordinary walk of a light caravan at three British miles the hour.

of irrigation. It is confined between two very high mounds, and on the northern one, near the road, is a small ruin, called Sheikh Shoubar, which is visible from afar. Before arriving at the Naher Malcha, and half way between Assad Khan and the next stage, is a small canal, over which is a bridge of one arch, now ruinous. Some time ago, a large lion came regularly every evening from the banks of the Euphrates, and took his stand on this bridge, to the terror of the traveller; he was at last shot by a Zobeide Arab. Till very lately this canal was filled from the Euphrates; and the desert in the vicinity was, in consequence, cultivated: but the proprietors, finding the exactions of the Government to be more than their industry could answer, were obliged to abandon the spot. The next khan, distant upwards of seven miles, is Bir-iunus, or Jonas's Well, called by the Turks *Orta Khan*, from its being erroneously counted the half of the distance between Bagdad and Hillah. It is only remarkable for a deep well, with a descent by steps to the water, and the tomb of a Turkish saint. Fine hawks, of the species called *Balaban*, used in hunting the antelope, are caught here. Near three miles from this, the road to Kerbela, by the bridge of Musseib on the Euphrates, branches off from the Hillah road, in the direction of S. 67 W.

Iskenderia is about seven miles from Bir-iunus, and is a large handsome khan, built lately at the expense of Mohammed Hussein Khan, Emin-eddoulah to the king of Persia, near a former much inferior

one of the same name, which is still standing, though deserted. All around it are vestiges of building, which would seem to indicate the prior existence of some large town, and the bricks of which it is built were dug up on the spot. The first khan on the Kerbela or rather Musseib road, called *Mizrakjee Oghlou*, from the name of the Bagdad merchant who founded it, is very near this, on the same line; and Musseib itself is visible in the direction of S. 80 W. From Iskenderia to Khan Hajee Suleiman (a mean building erected by an Arab) is a distance of upwards of eight miles; and at this khan the road is traversed by a canal cut from the Euphrates at the village of Naseria (which bears N. 20 W. from the road), and is full of water in the spring, as are many of the canals between this and Hillah.

Four miles from Hajee Suleiman is Mohawil, also a very indifferent khan, close to which is a large canal, with a bridge over it: beyond this every thing announces an approach to the remains of a large city. The ruins of Babylon may in fact be said almost to commence from this spot, the whole country between it and Hillah exhibiting, at intervals, traces of building, in which are discoverable burnt and unburnt bricks and bitumen; three mounds in particular attract attention from their magnitude. The ground to the right and left of the road bears the appearance of being partially, and occasionally, a morass, though, at the time we passed it, it was perfectly dry: the

road, which is due S., lies within a quarter of a mile of the celebrated mass, called by Pietro della Valle, the Tower of Belus; Hillah is nine miles from Mohawil, and nearly forty-eight from Bagdad.

Hillah is called by Abulfeda, Hillah Bene Mozeid; he, and the Turkish geographer, who copies him, say it was built, or rather augmented, by Saifed-doulah, in the year of the Hejira 495*, or A.D. 1101-2, in the land of Babel. The Turkish geographer appears to place the ruins of Babylon considerably more to the northward in the direction of Sura and Felugiah. The district called by the natives El-Aredth Babel extends on both sides the Euphrates. Its latitude, according to Niebuhr, is $32^{\circ} 28'$, and it is situated on the western bank of the Euphrates, a few shops and huts only being on the eastern. It is meanly built, and its population does not exceed between 6 and 7000, consisting of Arabs and Jews (who have one synagogue), there being no Christians, and only such Turks as are employed in the government. It is divided into seven small

* قال ياقوت في مشترك هي حلة بني مزيد بارض بابل وهي بين بغداد وبين الكوفة قال واول من اختط بها المنازل وعظمها سيف الدولة صدقة بن ديبس بن علي بن مزيد الاسدي في سنة ٤٩٥ قال و كان موضعها قبل ذلك يسمى الجامعين
Abulfeda.

حله بغداد ايله كوفه بيننده بوكا حله بني مزيد ديرلر وبو حله يه اول نزول ايدوب و منازل اخطاط ايله بوني تعظيم ايدن سيف الدولة صدقة بن ديبس بن علي بن مزيد الاسدي دركه دورتيوز طقسان بشده نزول ايتدي
Djihannuma.

mahalles or parishes ; but there is only one mosque in the town, all the other places of worship being mere *ibadetgahs* or oratories. The walls are of mud, and present a truly contemptible appearance ; but the present Pasha of Bagdad has ordered a new wall to be constructed of the finest Babylonian bricks. The gates are three in number, and, as usual in the East, each takes the name of the principal place it leads to, the northern one being called the gate of Hussein or Kerbela, the centre that of Tahmasia (a large village in the neighbourhood), and the southern the gate of Nejef or Imam Ali. The little street on the eastern side is also closed by a gate, or rather door. The gardens on both sides the river are very extensive, so that the town itself from a little distance appears embosomed in a wood of date-trees ; on the outer verge of the gardens on the west, small redans are established, within sight and hearing of each other, in each of which a matchlockman mounts guard at night ; and for greater security against the marauders of the Desert, the late Ali Pasha dug an ample trench round the whole, and built a citadel (which, as usual in these countries, is nothing more than a square inclosure) in the town, on the bank of the river.

Among the gardens a few hundred yards to the west of the Husseinia gate, is the Mesjid-el-Shems, a mosque built on the spot where popular tradition says a miracle, similar to that of the prophet Joshua, was wrought in favour of Ali, and from this the

mosque derives its appellation. It is a small building, having instead of a minaret an obelisk, or rather hollow cone fretted on the outside like a pine-apple, placed on an octagonal base: this form, which is a very curious one, I have observed in several very old structures, particularly the tomb of Zobeide, the wife of Haroun-al-raschid at Bagdad, and I am informed it cannot now be imitated. On the top of the cone is a mud cap, elevated on a pole, resembling the cap of liberty. This, they say, revolves with the sun; a miracle I had not the curiosity to verify. The inside of the mosque is supported by rows of short pillars about two feet in girth: from the top of each spring pointed arches, in form and combination resembling in a striking manner the Gothic architecture. It contains nothing remarkable except what the people show as the tomb of the prophet Joshua. This country abounds in supposed tombs of prophets. On the Tigris, between Bagdad and Bussora, they show the sepulchre of Ezra; twelve miles in the Desert to the S. W. of Hillah is that of Ezechiel, and to the southward the tomb of Job: the two former are places of pilgrimage of the Jews, who do not acknowledge those of Job and Joshua.

The district of Hillah extends from Husseinia (which is a canal leading from the Euphrates near Musseib to Imam Hussein) on the north, to the town of Hasca on the south. It is governed by a Bey, who is always a Turk or Georgian, appointed by the Pasha of Bagdad, from whom the govern-

ment is farmed for a stipulated yearly sum*. There is also a Serdar or commandant of Janissaries, and a

* For the information of those who may be curious regarding such subjects, I subjoin a statement of the revenue of Hillah, communicated to me by the Serraf Bashi of the place :—

Annual Receipts of the Governor of Hillah.

From the farms and villages	100,000
Duties on rice, corn, &c., grown in the vicinity and passing through the town from the Khezail territory	100,000
Farm of sesame dyeing	15,000
the butchery	6,000
silk	4,000
tannery	1,000
lime kilns	1,500
Collections of <i>voluntary</i> contributions levied on the townspeople under various pretexts about three times a year generally	8,000
Miri on the dates	20,000
Paid by the Commandant of Janissaries for his appointment	2,000
Private revenue of the Zabit, his own farms, gardens	20,000
<hr/>	
Total in piastres Hillah currency	292,500
Add the difference of exchange	50,000
<hr/>	
Total in standard Turkish piastres	342,500

Public payments made by him to the Bagdad Government.

To the Pasha	260,000
Kiahya Bey	30,000
<hr/>	
Total in Turkish piastres	290,000

He also supplies Government with 5500 tagars of corn and barley, in value about 165,000 piastres on the average ; but this he levies on the farmers at the rate of two tagars for every five, over and above the rent and imposts of their farms and produce. He must also supply the Pasha's army or any detachment of it that may be in the neighbourhood ; fee the most powerful members of Government from time to time, and yet be able to lay by a sufficiency not only for his own reim-

Cadi, whose office, unlike any other of the same kind in Turkey, has been continued in the same family for upwards of a century. The inhabitants of Hillah bear a very bad character. The air is salubrious, and the soil extremely fertile, producing great quantities of rice, dates, and grain of different kinds, though it is not cultivated to above half the degree of which it is susceptible.

The grand cause of this fertility is the Euphrates, the banks of which are lower and the stream more equal than the Tigris. Strabo says that it was a stadium in breadth at Babylon; according to Rennell, about 491 English feet; or D'Anville's still more reduced scale, 330. Niebuhr says at Hillah it is 400 Danish feet broad; my measurement by a graduated line at the bridge there, brings it to 75 fathoms, or 450 feet; its breadth however varies in its passage through the ruins. Its depth I found to be $2\frac{1}{2}$ fathoms, and the current runs at the medium rate of about two knots; when lowest being probably half a knot less, and when full, a knot more. The Tigris is infinitely more rapid, having a current of near seven knots when at its height. The Eu-

bursement, but also to pay the mulct that is invariably levied on Governors when they are removed, however well they may have discharged their duty. And when it is considered that his continuance in office seldom exceeds two or three years, it may well be imagined that he has recourse to other methods of accumulating wealth, and that the inhabitants of his district are proportionably oppressed. The regulation of this petty government is a just epitome of the general system which has converted some of the finest countries of the world into savage wastes and uninhabitable deserts.

phrates rises at an earlier period than the Tigris ; in the middle of the winter it increases a little, but falls again soon after ; in March it again rises, and in the latter end of April is at its full, continuing so till the latter end of June. When at its height it overflows the surrounding country*, fills the canals dug for its reception, without the slightest exertion of labour, and facilitates agriculture in a surprising degree. The ruins of Babylon are then inundated so as to render many parts of them inaccessible, by converting the valleys among them into morasses. But the most remarkable inundation of the Euphrates is at Felugiah, twelve leagues to the westward of Bagdad, where on breaking down the dyke which confines its waters within their proper channel, they flow over the country, and extend nearly to the banks of the Tigris, with a depth sufficient to render them navigable for rafts and flat-bottomed boats. At the moment I am now writing (May 24th, 1812) rafts laden with lime are brought on this inundation almost every day from Felugiah, to within a few hundred yards of the northern gate of Bagdad, called the Imam Mousa gate.

The water of the Euphrates is esteemed more sa-

* Otter came up the Euphrates from Bussora in the month of May, 1743, at the season when the river is rising. He speaks of the embankments raised to keep the river within bounds, and complains of the detention and other annoyances he suffered while passing through the extensive marsh to the southward of Babylon, in the country of the Khezail Arabs, which is formed by the waters of the Euphrates overflowing the surrounding country.—See *Voyage en Turquie et en Perse* ; par M. Otter, Tome ii., p. 196. 204.—ED.

lubrious than that of the Tigris. Its general course through the site of Babylon is N. and S*. I questioned the fishermen who ply on the river, respecting its bottom, and they all agreed that bricks and other fragments of building are very commonly found in it. From the gentleness of the current, regularity of the stream, and equal substance of the banks, I am of opinion that the Euphrates would not naturally alter its course in any great degree, certainly not so much as the Tigris, whose variations in a few years are often very considerable. A variety of circumstances may however have caused some alterations. It is evident from what Strabo says, that the neglected state of the canals had considerably injured the original stream, and it is possible that a part of it might have continued to flow through the channel cut by Cyrus for a long time afterwards†. That some

* In the year 1579 Balbi, a Venetian jeweller, travelling from Aleppo to Bagdad, embarked on the Euphrates at Bir, on the 10th of January, and arrived at Felugiah on the 21st of February. On the 24th, at sunrise, they passed a bridge over a stream which runs, when the water is high, from the Euphrates to the Tigris, and came at noon to the ruins of a city called Sendia, and then, in half an hour after, to the beginning of Old Babylon, and going along by the same, at night came to Nareisa, midway from Felugiah to Basdet, a place famous for robbers and lions. Before sunrise next day they travelled again along those ruins, leaving them on the left hand, seeing pieces of great walls ruined, and one piece of the great tower of Babylon, till, coming to Muscadon, they saw the towers of Bagdad or New Babylon. From Felugiah thither the soil seems good; "yet neither is there tree, or green grass, house, or castle, but mushrooms so good that the natives eat them raw."—Ed.

† Vide Rollin (see Appendix, No. 1), who quotes Arrian, whose work I regret not having at present to refer to*.

* See Appendix, No. 2.—Ed.

change in the course of the river has taken place, will be hereafter shown.

I have before remarked that the whole of this part of Mesopotamia is intersected by canals (نهر). These are of all ages ; and it is not uncommon to see workmen employed in excavating a new canal, close to, and parallel with, an old one, when it might be supposed that the cleansing the old one would be a work of much less toil. The high embankments of these canals easily impose on the unpractised eye for ruins of buildings, especially when the channel has been filled up by the accession of soil, and I doubt not are the origin of the belief, expressed by some travellers, that there are ruins in the gardens of Hillah. Niebuhr and Otter say that the remains of walls and edifices are in existence, though enveloped in woods and coppices. Otter in particular observes that the site of Babylon is generally covered with wood* : this is certainly incorrect. On the ruins of Babylon there is not a single tree growing, excepting the old one which I shall hereafter have occasion to mention ; but in the intervals of the ruins, where in all probability no building ever stood, there are some patches of cultivation. I made the most

* I am unacquainted with the original work of Mr. Otter, and imagine that the word *coppice* must exist only in the translation, as it is an improper term, the only wood being the date gardens of Hillah, to which certainly the word *coppice* will not apply^a.

^a Mr. Otter's expression is as follows :—" Le Geographe Turc place Babil auprès de Hilla, à la gauche du chemin en allant de là à Bagdad. Aujourd'hui on n'y voit qu'un bois taillis."—Voyage en Turquie et en Perse, par M. Otter, Tome ii., p. 211.—ED.

diligent search all through the gardens, but found not the slightest vestige of ruins, though previously I heard of many,—an example of the value of information resting solely on the authority of the natives. The reason is obvious. Ruins composed, like those of Babylon, of heaps of rubbish impregnated with nitre, cannot be cultivated, and any inferior mound would of course be levelled in making the garden.

In such a soil as that of Babylon it appears surprising how long some of the canals have remained. The *Naher Malcha*, a work of the Babylonian monarchs, might still be effectually repaired, and it is probable that many of the canals now seen on the site of Babylon may have been in existence when it was a flourishing city. Some of the canals were used for the purpose of navigation, and Alexander took great pains to cleanse and restore those that were out of order. Aristobulus, quoted by Strabo*, lib. xvi., p. 510, edit. Casaub., says that he went into these canals in a boat, which he steered himself, and inspected the repairs in person, in presence of a multitude of spectators, cleansing the mouths of some which were choked up with mud, and blocking up others. In one instance, where the canal led toward the morasses and lakes of the Arabian side, he opened a new mouth thirty stadia from the old one, in a more stony place, to ensure greater durability. He also dug basins for his fleet; and in performing these works, it is said the graves of many of the

* See Appendix, No. 3.

kings and princes who were buried in the morasses were dug up ; by which I understand that the bad state of the canals had caused inundations in the places of sepulture. From the yielding nature of the soil I can readily conceive the ease with which Cyrus dug a trench round the city, sufficient to contain the river (Cyrop. lib. vii.)*. I have not however been able to discover any traces either of this trench, or the lines of circumvallation.

The ruins of the eastern quarter of Babylon commence about two miles above Hillah, and consist of two large masses or mounds connected with, and lying N. and S. of each other, and several smaller ones which cross the plain at different intervals. The northern termination of this plain is Pietro della Valle's ruin†, from the S. E. angle of which (to which it evidently once joined, being only obliterated there by two canals,) proceeds a narrow ridge or mound of earth, wearing the appearance of having been a boundary wall. Vide the annexed plan (A). This ridge forms a kind of circular inclosure, and joins the S. E. point of the most southerly of the two grand masses.

The river bank is skirted by a ruin (B), which I shall, for perspicuity's sake, call its embankment, though, as will hereafter be seen, there is good reason for supposing it never was intended for one. It commences on a line with the lower extremity of the southernmost grand mound, and is there nearly

* See Appendix, No. 4.

† See Appendix, No. 5.

three hundred yards broad at its base, from the E. angle of which a mound (resembling the boundary A, but broader and flatter,) proceeds, taking a sweep to the S. E., so as to be nearly parallel with, and forty yards more to the south than, that boundary : this loses itself in the plain, and is in fact the most southerly of all the ruins. The embankment is continued in a right line to the north, and diminishes in breadth, but increases in elevation till at the distance of seven hundred and fifty yards from its commencement, where it is forty feet perpendicular height, and is interrupted by a break (C) nearly of the same breadth with the river : at this point a triangular piece of ground commences, recently gained from the river, which deserts its original channel above, and returns to it again here : this gained ground (D) is a hundred and ten yards in length, and two hundred and fifty in breadth at its angle or point, and along its base are traces of a continuation of the embankment, which is there a narrow line that soon loses itself. Above this, the bank of the river affords nothing worthy of remark ; for though in some places there are slight vestiges of building, they were evidently not connected with the above-mentioned embankment.

The whole of the area inclosed by the boundary on the east and south, and river on the west, is two miles and six hundred yards in breadth from E. to W. (exclusive of the gained ground, which I do not take into account, as comprising no part of the ruins),

as much from Pietro della Valle's ruin to the southern part of the boundary (A), or two miles and one thousand yards to the most southerly mound of all, which has been already mentioned as branching off from the embankment. This space is again longitudinally subdivided into nearly half, by a straight line of the same kind with the boundary, but much its inferior in point of size (E). This may have crossed the whole inclosure from N. to S., but at present only a mile of it remains. Exactly parallel with it, and a little more than a hundred yards to the W. of it, is another line precisely of a similar description, but still smaller and shorter (F): its northern termination is a high heap of rubbish, of a curious red colour, nearly three hundred yards long, and one hundred broad, terminating on the top in a ridge: it has been dug into in various parts, but few or no fine whole bricks have been found in it*. All the ruins of Babylon are contained within the western division of the area, *i. e.* between the innermost of these lines and the river, there being no vestiges of building in the eastern or largest division between the outermost line and the external boundary.

Before entering into a minute description of the

* I saw one found at the foot of this heap, which had an impression resembling the spade or shovel in use at present among the Arabs. This is a singular specimen, as I never saw an instance of any other impression than that of writing on a Babylonian brick. I therefore made a drawing of it, which will be given in its proper place.

ruins, to avoid repetition, it is necessary to state that they consist of mounds of earth, formed by the decomposition of building, channelled and furrowed by the weather, and the surface of them strewed with pieces of brick, bitumen, and pottery.

On taking a view of the ruins from south to north, the first object that attracts attention, is the low mound connected with the embankment; on it are two little parallel walls close together, and only a few feet in height and breadth, which bear indisputable marks of having formed part of a Mohametan oratory or *Koubbè*. This ruin is called *Jumjuma*, (Calvary,) and gives its name to a village a little to the left of it. The Turkish geographer says, "To the north of Hillah on the river is *Jumjuma*, which is the burial-place of a Sultan." جمجمة is the common name here for a skull. It also means, according to Castell and Golius, "Puteus in loco salsuginoso fossus." Either etymology would be applicable. To this succeeds the first grand mass of ruins, which is one thousand one hundred yards in length, and eight hundred in greatest breadth, its figure nearly resembling that of a quadrangle: its height is irregular; but the most elevated part may be about fifty or sixty feet above the level of the plain, and it has been dug into for the purpose of procuring bricks. Just below the highest part of it is a small dome in an oblong inclosure, which, it is

pretended, contains the body of a son of Ali, named Amran, together with those of seven of his companions, all slain in the battle of Hillah. Unfortunately for the credit of the tradition, however, it is proved on better authority to be a fraud not uncommon in these parts, Ali having had no son of this description. From the most remarkable object on it, I shall distinguish this mound by the name of Amran.

On the north is a valley of five hundred and fifty yards in length, the area of which is covered with tussocks of rank grass, and crossed by a line of ruins of very little elevation. To this succeeds the second grand heap of ruins, the shape of which is nearly a square, of seven hundred yards length and breadth, and its S. W. angle is connected with the N. W. angle of the mounds of Amran, by a ridge of considerable height, and nearly one hundred yards in breadth. This is the place where Beauchamp made his observations, and it is certainly the most interesting part of the ruins of Babylon: every vestige discoverable in it declares it to have been composed of buildings far superior to all the rest which have left traces in the eastern quarter: the bricks are of the finest description; and notwithstanding this is the grand storehouse of them, and that the greatest supplies have been, and are now, constantly drawn from it, they appear still to be abundant. But the operation of extracting the bricks has caused great confusion, and contributed much to increase the

difficulty of deciphering the original design of this mound, as in search of them the workmen pierce into it in every direction, hollowing out deep ravines and pits, and throwing up the rubbish in heaps on the surface. In some places they have bored into the solid mass, forming winding caverns, and subterranean passages, which, from their being left without adequate support, frequently bury the workmen in the rubbish. In all these excavations, walls of burnt brick, laid in lime mortar of a very good quality, are seen; and in addition to the substances generally strewn on the surfaces of all these mounds, we here find fragments of alabaster vessels, fine earthen-ware, marble, and great quantities of varnished tiles, the glazing and colouring of which are surprisingly fresh. In a hollow near the southern part I found a sepulchral urn of earthen-ware, which had been broken in digging, and near it lay some human bones, which pulverised with the touch.

To be more particular in my description of this mound, not more than two hundred yards from its northern extremity is a ravine (G), hollowed out by those who dig for bricks, in length near a hundred yards, and thirty feet wide by forty or fifty deep. On one side of it a few yards of wall remain standing, the face of which is very clean and perfect, and it appears to have been the front of some building. The opposite side is so confused a mass of rubbish, that it should seem the ravine had been worked

through a solid building. Under the foundations at the southern end an opening is made, which discovers a subterranean passage, floored and walled with large bricks, laid in bitumen, and covered over with pieces of sand-stone, a yard thick, and several yards long; the weight of the whole being so great as to have given a considerable degree of obliquity to the side-walls of the passage. It is half full of brackish water (probably rain water impregnated with nitre, in filtering through the ruins, which are all very productive of it), and the workmen say that some way on it is high enough for a man on horseback to pass: as much as I saw of it, it was near seven feet in height, and its course to the south. This is described by Beauchamp (*vide* Rennell, p. 369)*, who most unaccountably imagines it must have been part of the city wall. The superstructure over the passage is cemented with bitumen, other parts of the ravine with mortar, and the bricks have all writing on them. The northern end of the ravine appears to have been crossed by an extremely thick wall of yellowish brick, cemented with a brilliant white mortar, which has been broken through in hollowing it out; and a little to the north of it I discovered what Beauchamp saw imperfectly, and understood from the natives to be an idol. (Rennell, *ibid.*) I was told the same thing, and that it was discovered by an old Arab in digging, but that not knowing what to do with it, he covered it up

* See Appendix, No. 6.



EAST FACE, KASIR.

WILLIAMS DEL. & SC.

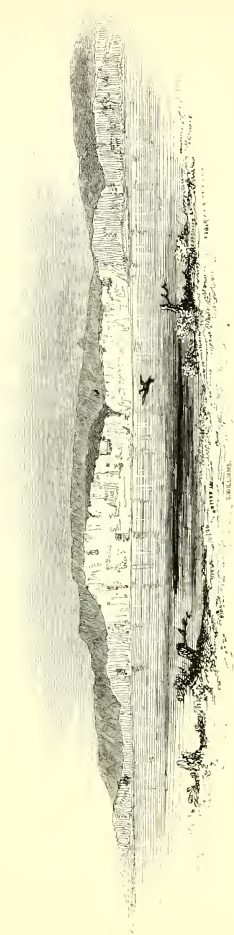
again.* On sending for the old man, who pointed out the spot, I set a number of men to work, who after a day's hard labour, laid open enough of the statue to show that it was a lion of colossal dimensions, standing on a pedestal, of a coarse kind of grey granite, and of rude workmanship; in the mouth was a circular aperture, into which a man might introduce his fist.

A little to the west of the ravine at (H) is the next remarkable object, called by the natives the Kasr, or Palace,† by which appellation I shall designate the whole mass. It is a very remarkable ruin, which being uncovered, and in part detached from the rubbish, is visible from a considerable distance, but so surprisingly fresh in its appearance, that it was only after a minute inspection I was satisfied of its being in reality a Babylonian remain. It consists of several walls and piers (which face the cardinal points), eight feet in thickness, in some places ornamented with niches, and in others strengthened by pilasters and buttresses, built of fine burnt brick (still perfectly clean and sharp), laid in lime-cement of such tenacity, that those whose business it is to find bricks, have given up working, on account of the extreme difficulty of extracting them whole. The tops of these walls are broken, and may have been much higher. On the outside they have in some places

* It is probable that many fragments of antiquity, especially of the larger kind, are lost in this manner. The inhabitants call all stones with inscriptions or figures on them *Idols*, *pin*

† See accompanying Plate.

been cleared nearly to the foundations, but the internal spaces formed by them are yet filled with rubbish, in some parts almost to their summit. One part of the wall has been split into three parts, and overthrown as if by an earthquake; some detached walls of the same kind, standing at different distances, show what remains to have been only a small part of the original fabric; indeed it appears that the passage in the ravine, together with the wall which crosses its upper end, were connected with it. There are some hollows underneath, in which several persons have lost their lives; so that no one will now venture into them, and their entrances have now become choked up with rubbish. Near this ruin is a heap of rubbish, the sides of which are curiously streaked by the alternation of its materials, the chief part of which, it is probable, was unburnt brick, of which I found a small quantity in the neighbourhood, but no reeds were discoverable in the interstices. There are two paths near this ruin, made by the workmen, who carry down their bricks to the river side, whence they are transported by boats to Hillah; and a little to the N.N.E. of it is the famous tree which the natives call *Athelè*, and maintain to have been flourishing in ancient Babylon, from the destruction of which, they say, God purposely preserved it, that it might afford Ali a convenient place to tie up his horse after the battle of Hillah! It stands on a kind of ridge, and nothing more than one side of its trunk remains (by which it appears to have been of con-



ELEVATION OF BABYLON.

siderable girth) : yet the branches at the top are still perfectly verdant, and gently waving in the wind, produce a melancholy rustling sound. It is an ever-green, something resembling the *lignum vitæ*, and of a kind, I believe, not common in this part of the country, though I am told there is a tree of the same description at Bussora.

All the people of the country assert that it is extremely dangerous to approach this mound after night-fall, on account of the multitude of evil spirits by which it is haunted.

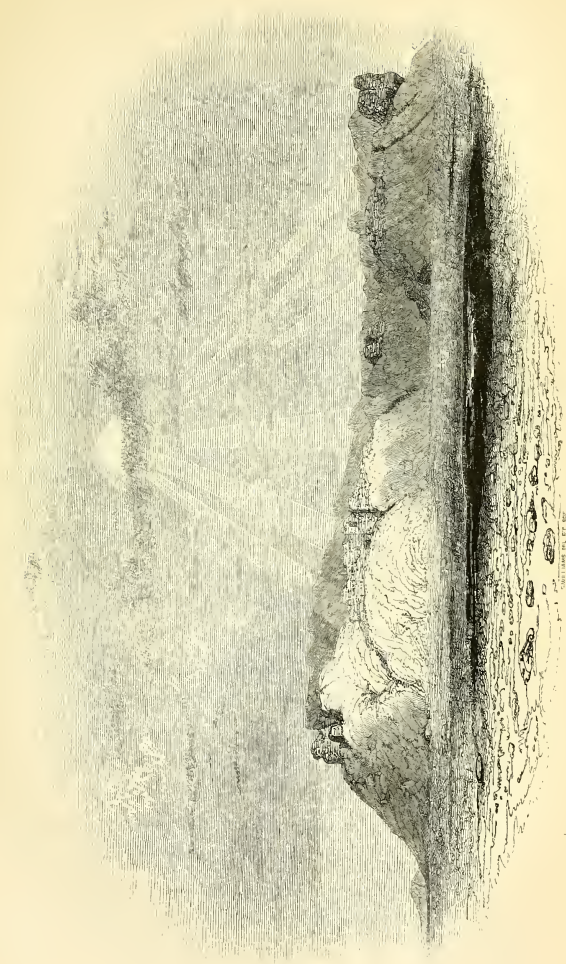
It will not be necessary to describe the inferior heaps, which cross the plain between the two principal mounds, and the inner line (F), and whose form and extent will be sufficiently apparent from the accompanying sketch ; but, previous to giving an account of the last grand ruin, I shall say a few words more on the embankment of the river, which is separated from the mounds of Amran and the Kasr by a winding valley or ravine, a hundred and fifty yards in breadth, the bottom of which is white with nitre, and apparently never had any buildings in it, except a small circular heap in the centre of it near the point (C). The whole embankment* on the river side is abrupt, perpendicular, and shivered by the action of the water ; at the foot of the most elevated and narrowest part of it (K), cemented into the burnt brick wall of which it is composed, are a number of urns filled with human bones, which had not under-

* See accompanying Plate.

gone the action of fire. The river appears to have encroached here, for I saw a considerable quantity of burnt bricks, and other fragments of building in the water.

A mile to the north of the Kasr, or full five miles distant from Hillah, and nine hundred and fifty yards from the river bank, is the last ruin of this series, which has been described by Pietro della Valle, who determines it to have been the Tower of Belus, an opinion adopted by Rennell. The natives call it Mukallibé (مقلبه) or, according to the vulgar Arab pronunciation of these parts, Mujelibè, meaning overturned; they sometimes also apply this term to the mounds of the Kasr. It is of an oblong shape, irregular in its height and the measurement of its sides, which face the cardinal points; the northern side being two hundred yards in length, the southern two hundred and nineteen, the eastern one hundred and eighty-two, and the western one hundred and thirty-six; the elevation of the S.E. or highest angle, one hundred and forty-one feet. The western face, which is the least elevated, is the most interesting on account of the appearance of building it presents.* Near the summit of it appears a low wall, with interruptions, built of unburnt bricks mixed up with chopped straw or reeds, and cemented with clay-mortar of great thickness, having between every layer a layer of reeds; and on the north side are also some vestiges of a similar construction. The S.W.

* See accompanying Plate.



W. & A. GILBEY DEL. & F. GILBEY SCULPT.

WESTERN FACE, MUJELIBÉ.

angle is crowned by something like a turret or lantern: the other angles are in a less perfect state, but may originally have been ornamented in a similar manner. The western face is lowest, and easiest of ascent, the northern the most difficult. All are worn into furrows by the weather; and in some places, where several channels of rain have united together, these furrows are of great depth, and penetrate a considerable way into the mound. The summit is covered with heaps of rubbish, in digging into some of which, layers of broken burnt brick, cemented with mortar are discovered, and whole bricks with inscriptions on them are here and there found: the whole is covered with innumerable fragments of pottery, brick, bitumen, pebbles, vitrified brick or scoria, and even shells, bits of glass, and mother-of-pearl. On asking a Turk how he imagined these latter substances were brought there, he replied, without the least hesitation, "By the deluge." There are many dens of wild beasts in various parts, in one of which I found the bones of sheep and other animals, and perceived a strong smell like that of a lion. I also found quantities of porcupine quills, and in most of the cavities are numbers of bats and owls. It is a curious coincidence, that I here first heard the oriental account of satyrs. I had always imagined the belief of their existence was confined to the mythology of the west: but a tchoadar, who was with me when I examined this ruin, mentioned by accident, that in this desert an animal is found, resembling a man from the head to the waist, but

having the thighs and legs of a sheep or goat; he said also that the Arabs hunt it with dogs, and eat the lower parts, abstaining from the upper, on account of their resemblance to those of the human species. "But wild beasts of the desert shall lie there, and their houses shall be full of doleful creatures; and owls shall dwell there, and satyrs shall dance there." Isaiah xiii. 21.*

In the northern face of the Mujelibè, near the summit, is a niche or recess, high enough for a man to stand upright in, at the back of which is a low aperture leading to a small cavity, whence a passage branches off to the right, sloping upwards in a westerly direction, till it loses itself in the rubbish. The natives call this the serdaub or cellar; and a respectable person informed me, that four years ago, some men searching in it for bricks, pulled out a quantity of marble, and afterwards a coffin of mulberry wood, containing a human body, inclosed in a tight wrapper, and apparently partially covered with bitumen, which crumbled into dust soon after exposure to the

* I with difficulty refrain from transcribing the whole of this most spirited and poetical chapter. The Hebrew word which we translate *satyrs* is שְׂעִירִים literally "the hairy ones," a signification which has been preserved in the Vulgate. In Lev. xvii. 7, the word is used for "devils, evil spirits." The present Jews understand it in this place as synonymous with דִּמְיוֹנִים or demons. I know not why we introduced the word *satyrs*,—probably on the authority of Aben Ezra, or some other commentator,—but we should have been cautious how we made the Prophet, in a manner, accountable for a fabulous being. Since the above was written, I find that the belief of the existence of satyrs is by no means rare in this country. The Arabs call them Sied Assad, and say that they abound in some woody places, near Semava on the Euphrates.

air. This account, together with its appearing the most favourable spot to ascertain something of the original plan of the whole, induced me to set twelve men to work, to open a passage into the serdaub from above. They dug into a shaft or hollow pier, sixty feet square, lined with fine brick laid in bitumen, and filled up with earth; in this they found a brass spike, some earthen vessels, (one of which was very thin, and had the remains of fine white varnish on the outside,) and a beam of date-tree wood. On the third day's work, they made their way into the opening, and discovered a narrow passage nearly ten feet high, half filled with rubbish, flat on the top, and exhibiting both burnt, and unburnt bricks; the former, with inscriptions on them, and the latter, as usual, laid with a layer of reeds between every row, except in one or two courses near the bottom, where they were cemented with bitumen; a curious and unaccountable circumstance. This passage appeared, as if it originally had a lining of fine burnt brick, cemented with bitumen, to conceal the unburnt brick, of which the body of the building was principally composed. Fronting it is another passage (or rather a continuation of the same to the eastward, in which direction it probably extends a considerable distance, perhaps even all along the northern front of the Mujelibè), choked up with earth, in digging out which, I discovered near the top a wooden coffin, containing a skeleton in high preservation. Under the head of the coffin was a round pebble; attached

to the coffin, on the outside, a brass bird, and inside, an ornament of the same material, which had, apparently, been suspended to some part of the skeleton. These, could any doubt remain, place the antiquity of the skeleton beyond all dispute. This being extracted, a little further in the rubbish the skeleton of a child was found ; and it is probable that the whole of the passage, whatever its extent may be, was occupied in a similar manner. No skulls were found, either here, or in the sepulchral urns at the bank of the river.

At the foot of the Mujelibè, about seventy yards from it, on the northern and western sides, are traces of a very low mound of earth, which may have formed an inclosure round the whole. Further to the north of the river, there are no more vestiges of ruins ; but the heaps, in the direction of the Bagdad road, shall be examined more particularly at a future opportunity.

I have now done with the eastern side of the river, and shall next proceed to take a survey of all that remains of Babylon on the western. The loose and inaccurate accounts of some modern travellers have misled D'Anville and Rennell into the belief of there being considerable ruins on the western bank of the river, corresponding with those I have just described on the eastern. That this is not the case, I was satisfied by the view I obtained from the top of the Mujelibè ; yet I determined, for greater accuracy, to examine the whole bank minutely. It is flat, and

intersected by canals, the principal of which are the Tajeea, or Ali Pasha's Trench, and the canal of Tahmasia. There are a few small villages on the river, inclosed by mud walls, and surrounded by cultivation; but there is not the slightest vestige of ruins, excepting opposite the mass of Amran, where are two small mounds of earth, overgrown with grass, forming a right angle with each other, and a little further on, are two similar ones. These do not exceed a hundred yards in extent, and the place is called by the peasants *Anana*. To the north the country has a verdant marshy appearance.

But although there are no ruins in the immediate vicinity of the river, by far the most stupendous and surprising mass of all the remains of Babylon is situated in this desert, about six miles to the S.W. of Hillah. It is called by the Arabs *Birs Nemroud*,* by the Jews *Nebuchadnezzar's Prison*, and has been described both by Père Emanuel and Niebuhr † (who was prevented from inspecting it closely by fear of the Arabs), but I believe it has not been noticed

* The etymology of the word *Birs* (برس) would furnish a curious subject for those who are fond of such discussion. It appears not to be Arabic, as it has no meaning which relates to this subject in that language, nor can the most learned person here assign any reason for its being applied to this ruin. בִּירָה בִּירְתָא in Chaldean signifies a palace, and הַבִּירָה *par excellence*, the Temple of Jerusalem.

בִּרְץ in the same language, and بَرَص pl. بَرَصَة Ar. mean the habitation of demons, or a sandy desert.

† See Appendix, No. 7.

by any other traveller. Rennell, on the authority of D'Anville, admits Père Emanuel's ruin into the limits of Babylon, but excludes Niebuhr's, which he says cannot be supposed to have been less than two or three miles from the S.W. angle of the city. No one, who had not actually examined the spot could ever imagine them in fact to be one and the same ruin.

I visited the Birs under circumstances peculiarly favourable to the grandeur of its effect. The morning was at first stormy, and threatened a severe fall of rain; but as we approached the object of our journey, the heavy clouds separating discovered the Birs frowning over the plain, and presenting the appearance of a circular hill, crowned by a tower, with a high ridge extending along the foot of it. Its being entirely concealed from our view, during the first part of our ride, prevented our acquiring the gradual idea, in general so prejudicial to effect, and so particularly lamented by those who visit the Pyramids. Just as we were within the proper distance, it burst at once upon our sight, in the midst of rolling masses of thick black clouds partially obscured by that kind of haze, whose indistinctness is one great cause of sublimity, whilst a few strong catches of stormy light, thrown upon the desert in the back-ground, served to give some idea of the immense extent and dreary solitude of the wastes in which this venerable ruin stands.

The Birs Nemroud is a mound of an oblong figure, the total circumference of which is seven hundred and sixty-two yards. At the eastern side it is cloven by a deep furrow, and is not more than fifty or sixty feet high; but at the western it rises in a conical figure, to the elevation of one hundred and ninety-eight feet, and on its summit is a solid pile of brick, thirty-seven feet high by twenty-eight in breadth, diminishing in thickness to the top, which is broken and irregular, and rent by a large fissure extending through a third of its height. It is perforated by small square holes disposed in rhomboids. The fine burnt bricks of which it is built have inscriptions on them; and so admirable is the cement, which appears to be lime-mortar, that, though the layers are so close together, that it is difficult to discern what substance is between them, it is nearly impossible to extract one of the bricks whole. The other parts of the summit of this hill are occupied by immense fragments of brick-work, of no determinate figure, tumbled together and converted into solid vitrified masses, as if they had undergone the action of the fiercest fire, or been blown up with gunpowder, the layers of the bricks being perfectly discernible,—a curious fact, and one for which I am utterly incapable of accounting. These, incredible as it may seem, are actually the ruins spoken of by Père Emanuel, who takes no sort of notice of the prodigious mound on which they are elevated.*

* Le P. Emanuel dit avoir vu (dans la partie occidentale) de

It is almost needless to observe that the whole of this mound is itself a ruin, channelled by the weather, and strewed with the usual fragments, and with pieces of black stone, sand-stone, and marble. In the eastern part, layers of unburnt brick are plainly to be seen, but no reeds were discernible in any part : possibly the absence of them here, when they are so generally seen under similar circumstances, may be an argument of the superior antiquity of the ruin. In the north side may be seen traces of building exactly similar to the brick-pile. At the foot of the mound a step may be traced, scarcely elevated above the plain, exceeding in extent by several feet each way the true or measured base ; and there is a quadrangular enclosure round the whole, as at the Mujelibè, but much more perfect and of greater dimensions. At a trifling distance from the Birs, and parallel with its eastern face, is a mound not inferior to that of the Kasr in elevation, but much longer than it is broad. On the top of it are two Koubbès or oratories, one called Makam Ibrahim Khalil, and said to be the place where Abraham was thrown into the fire by order of Nemroud, who surveyed the scene from the Birs ;* the other, which

grands pans de murs encore debout, d'autres renversés, mais d'une construction si solide, qu'il n'est presque pas possible de détacher d'entr'eux les carreaux de brique d'un pied et demi de longueur dont on sait que les édifices de Babylone étaient construits. Les Juifs, établis dans le pays, appellent ces restes de bâtisse *La Prison de Nabuchadnasser* ; il conviendrait mieux de dire *le palais*. D'Anville sur l'Euphrate et le Tigre, p. 117.

* The person here referred to is no other than Abraham, respect-

is in ruins, is called Makam Saheb Zeman ;* but to ing whom the Mahometans have numerous fabulous histories ; the one relating to his being thrown into the fire is as follows :—they believe him to have been a subject of Nimrod's—that he was born and hid by his mother in a cave until he was fifteen, to preserve him from falling into the hands of Nimrod, who would have put him to death, on account of a dream which his astrologers interpreted to relate to a child who should be born at that time, and become a great prince, and very formidable to Nimrod.

During this time of the seclusion of Abraham, he saw no one but his mother. She was surprised, whenever she went to see him, to find him sucking his fingers, out of which proceeded milk and honey ; but her surprise was changed into joy, when she understood that it was God, who had thus undertaken to supply her son with nourishment.

He is described afterwards as being taken out of the cave, and brought by his parents into Babylon, which is called Nimrod's capital. On his way, everything he sees astonishes him, and he is represented as inquiring who is the Creator of all things, and consequently who is his Lord. At first sight of the stars, the moon, and the sun, he is inclined to worship them as the Creator, until he sees them going down.

His father presents him to Nimrod, surrounded with all his courtiers ; and, upon hearing from his father that this personage is the Lord of all the people standing around him, and that they all acknowledge him as their God, Abraham looks at Nimrod, and, observing that he was very ugly, asks his father how it could happen that he whom he called his God should have made creatures so much more beautiful than himself ; that a Creator must necessarily be more perfect than his creation. This was the first occasion taken by Abraham, says the Mahometan account, to deliver his father from idolatry, and to preach to him that unity of God, the Creator of all things, which had been revealed to him during his meditations the night before. So great was his zeal upon this subject, that it drew down upon him the anger of his father, and brought him into great difficulties with Nimrod's courtiers, who refused to acquiesce in the truth he set before them. A report of these discussions reached the ears of Nimrod, and this proud and cruel king ordered Abraham to be thrown into a heated furnace, out of which, however, he was taken uninjured : the fire not having been permitted to touch him. The title given by the Mahometans to Abraham is Khalil Ullah, or the friend of God.

* This is the same person as is sometimes called Mehdy. He was

what part of Mehdy's life it relates, I am ignorant. In the oratories I searched in vain for the inscriptions mentioned by Niebuhr : near that of Ibrahim Khalil is a small excavation into the mound, which merits no attention ; but the mound itself is curious, from its position, and correspondence with others, as I shall in the sequel have occasion to remark.

Round the Birs are traces of ruins to a considerable extent. To the north is the canal which supplies Mesjid Ali with water, which was dug at the expense of the Nuwaub Shujah ed doulah, and called after his country Hindia. We were informed that from the summit of the Birs, in a clear morning, the gilt dome of Mesjid Ali might be seen.

To this account of the ruins, which are supposed to have stood in the enceinte of the city itself, it may be useful to subjoin a notice of some remarkable places in the vicinity of Hillah, which bear some relation to the ruins of Babylon. Nebbi Eyoub, or the tomb of the prophet Job, is a Koubbè or oratory situated near the Euphrates, three leagues to the southward of Hillah ; and just below it is a large canal called Jazeria (جاذرية), said to be of great antiquity ; close to which are two large mounds or masses of

the last of the twelve Imams of the family of Ali. He was born at Samara in the year 255 of the Hegira ; and we are told by the Mahometans that he is still alive ; that he was shut up at the age of nine years by his mother, who still watches over him carefully, until the time of his appearance at the end of the world, with the Lord Jesus Christ, to fight against Antichrist, and to unite Christians and Mahometans in one.

ruins named El Mokhatat (المخاطط) and El Adouar (الادوار). Four leagues below Hillah, on the same side of the Euphrates, but not on the bank, is a village called Jerbouiya (جربوعية), near which is a considerable collection of ruins similar to those of Babylon, and called by the natives Boursa (بورسه), probably the Borosippa of Strabo, and Barsita of Ptolemy.* The governor of Hillah informed me of a mound as large as the Mujelibè, situated thirty-five hours to the southward of Hillah; and that a few years ago, a cap or diadem of pure gold, and some other articles of the same metal, were found there, which the Khezail Arabs refused to give up to the Pasha. In the western desert, bearing N. W. from the top of the Mujelibè, is a large mound called Towereij (طويريج). In the same desert, two leagues to the west of Hillah, is the village of Tahmasia, built by Shah Tahmas, where, it is said, are some trifling mounds; this village must occupy part of the site of Babylon. From the top of the Mujelibè in a southerly direction, at a great distance, two large mounds are visible, with whose names I am unacquainted. Five or six miles to the east of Hillah is

* בורסיפא quasi ביר שאפי in Chaldean, whence the Greek Borosippa, is, according to the Talmuds, the name of the place in Babel near the Tower, whose air renders a man forgetful. I have not yet had leisure to search the Talmud and other Hebrew and Chaldean works for the traditions concerning Babylon, and am unwilling to detain this memoir (which has already been so much and so unexpectedly retarded) any longer for such information: but I have some hopes of being able to make it the subject of a future communication.

Al Hheimar (الحيمير), which is a curious ruin, as bearing, on a smaller scale, some resemblance to the Birs Nemroud. The base is a heap of rubbish, on the top of which is a mass of red brick-work, between each layer of which is a curious white substance, which pulverises on the least touch. I have not yet visited Al Hheimar, but those who have conjecture, from the grain of the white substance or powder, seemingly lying in filaments, that it must have originally been layers of reeds. I have seen a specimen adhering to a piece of brick, but not sufficiently well preserved to enable me to form any decisive judgment; but I cannot imagine how reeds, under any circumstances, could be brought to assume such an appearance; and besides, they are never found in buildings composed, as this is, of burnt brick.*

To these ruins I add one, which, though not in the same direction, bears such strong characteristics of a Babylonian origin, that it would be improper to omit a description of it in this place: I mean Akerkouf (عقرقوف), or, as it is more generally called, Nimrod's Tower, for the inhabitants of these parts are as fond of attributing every vestige of antiquity to Nimrod, as those of Egypt are to Pharaoh. It is situated ten miles to the N. W. of Bagdad, and is a thick mass of unburnt brick-work of an irregular shape, rising out of a base of rubbish; there is a layer of reeds between every fifth or sixth (for the

* See Appendix, No. 9.

number is not regulated) layer of bricks. It is perforated with small square holes, as the brick-work at the *Birs Nemroud*, and about half way up on the east side is an aperture like a window; the layers of cement are very thin, which, considering it is mere mud, is an extraordinary circumstance. The height of the whole is one hundred and twenty-six feet; diameter of the largest part, one hundred feet; circumference of the foot of the brick-work above the rubbish, three hundred feet: the remains of the tower contain one hundred thousand cubic feet. *Vide Ives's Travels*, p. 298.* To the east of it is a dependent mound, resembling those at the *Birs* and *Al Hheimar*.

I shall now inquire which of the public works, that conspired with its size to render *Babylon* so celebrated among the ancients, was likely to have left the most considerable traces at the present day; and how far the vestiges, which it may be imagined would have remained, correspond with what we now find.

Of all the ancient writers who have described *Babylon*, *Herodotus* and *Diodorus* are the most minute. Much weight must certainly be placed on the accounts of the former of these historians, who was an eye-witness of what he relates, notwithstanding the exaggeration and credulity, which may in some instances be laid to his charge. The accounts of later writers are of comparatively small value.

* See Appendix, No. 10.

Pliny, in particular, has done nothing more than copy Herodotus. Strabo's general accuracy and personal experience indeed, render his description of great interest, as far as it goes; but he could only have seen Babylon at a period, when its public buildings had already become heaps of rubbish, and consequently must have depended upon more ancient authorities for particular accounts of most of them.*

The greatest circumference the ancients have ascribed to the city walls, is four hundred and eight stadia; the most moderate, three hundred and sixty. Strabo, who is excellent authority in this particular, as he must have seen the walls in a sufficiently perfect state to form his judgment, allows three hundred and eighty-five; but the smallest computation supposes an area for the city, of which we can now scarcely form an idea. Whatever may have been the size of Babylon, I imagine that its population bore no proportion to it; and that it would convey to a modern the idea of an enclosed district, rather than that of a regular city; the streets, which are said to have led from gate to gate across the area, being no more than roads through cultivated land, over which buildings were distributed in groups or patches. Quintus Curtius says positively that there was pasture and arable land in the enclosure, sufficient to support the whole of the population during a long siege; and Xenophon reports, that when Cyrus took Babylon (which event happened at night), the

* See Appendix, No. 11.

inhabitants of the opposite quarter of the town were not aware of it till the third part of the day, *i. e.* three hours after sunrise ; which was very possibly owing to the great distance of one cluster of houses from another, since, had they been connected with each other in regular streets, the noise and confusion would, I think, have spread the information of the event with much greater rapidity.

All accounts agree in the height of the walls, which was fifty cubits, having been reduced to these dimensions from the prodigious height of three hundred and fifty feet, by Darius Hystaspes, after the rebellion of the town, in order to render it less defensible. I have not been fortunate enough to discover the least trace of them, in any part of the ruins at Hillah ; which is rather an unaccountable circumstance, considering that they survived the final ruin of the town, long after which they served as an enclosure for a park ; in which comparatively perfect state, St. Jerome informs us, they remained in his time. Nor can the depredations subsequently committed on them in the building of Hillah, and other similar small places, satisfactorily account for their having totally disappeared ; for, though it is evident they would have been the first object to attract the attention of those who searched after bricks ; yet, when they had been thoroughly dilapidated, the mass of rubbish, which most probably formed the heart or substance of them, together with the very deep ditch,

would alone have left traces sufficiently manifest at the present day.

Similar in solidity and construction to the city walls, was the artificial embankment of the river, with its breast-work, the former of which Diodorus informs us was one hundred stadia in length. The traces of these are entirely obliterated ; for though on a cursory view, the mound which now forms the eastern bank of the river, (and which for perspicuity's sake I have called the embankment,) would be likely to deceive observers, yet the alteration in the course of the river at that place, the form of the southern part of the mound, and, above all, the sepulchral urns found built up in it, close to the water's edge, are sufficient proofs that it cannot be the remains of the ancient embankment.

The most extraordinary building within the city was the tower, pyramid, or sepulchre of Belus, the base of which Strabo says was a square of a stadium each side, and it was a stadium in height. It has been generally considered that Herodotus has given an extravagant account of its dimensions : he says that the first platform, or largest and lowest of the eight towers of which it was composed, was *σταδίου καὶ τὸ μῆκος καὶ τὸ εὖρος*, which has been rendered “ a stadium in height and breadth :” which, supposing the seven other towers to have borne some proportion to it, may be clearly pronounced an absurdity : but *μῆκος* also signifies length, space, pro-

lixity; in this signification it combines better with *εὖρος*, as length and breadth is a more usual phrase, than height and breadth, and the passage then would mean no more, than that the base was a square of a stadium.

If a sentence can be interpreted in two different ways, it is surely not fair to charge the author with the worst; and it is possible that, on a critical examination of the venerable father of history, much of the blame arising from his reputed inaccuracies would be divided between his transcribers and translators.* The tower stood in a quadrangle of two miles and a half, which contained the temple, in which divine honours were paid to the tutelar deity of Babylon, and probably also cells for the numerous establishment of priests attached to it.

An additional interest attaches itself to the sepulchre of Belus, from the probability of its identity with the tower which the descendants of Noah, with Belus at their head, constructed in the plain of Shinaar, the completion of which was prevented in so memorable a manner. I am strongly inclined to differ from the sense in which Gen. xi. 4. is com-

* The only passage my memory immediately supplies me with, in which the word *μῆκος* may also be understood in the way I propose, is the 155th line of the 7th book of the Iliad. Nestor is relating his victory over the giant Ereuthalion; after having stretched him on the plain, he exclaims, "Τὸν δὲ μήκιστον καὶ κάρτιστον πτόνον ἔνθα" evidently with the idea present to him of viewing the space of ground he covered as he lay; for he immediately adds, Πολλὰς γὰρ τις ἔκειτο παρ' ἡρώος ἔνθα καὶ ἔνθα. But, I doubt not, better authorities might be easily produced.

monly understood, and I think too much importance has been attached to the words “*may reach unto heaven*,” which are not in the original, whose words are **וְרָאשׁוֹ בְּשָׁמַיִם** “*and its top to the skies*,” by a metaphor common to all ages and languages, *i. e.* with a very elevated and conspicuous summit. This is certainly a more rational interpretation than supposing a people in their senses, even at that early period, would undertake to scale heaven by means of a building of their own construction. The intention in raising this structure might have been displeasing to the Almighty on many other accounts ; such for instance as the paying of divine honours to other beings, or the counteracting of the destined dispersion of mankind. For, notwithstanding the testimony of Josephus’ Sibyl, we have no good reason for supposing that the work suffered any damage, and, allowing it to have been in any considerable degree of forwardness, it could have undergone no material change, at the period the building of Babel was recommenced. It is therefore most probable, that its appearance, and the tradition concerning it, gave those who undertook the continuation of the labour the idea of a monument in honour of Belus ; and the same motives which made them persist in adhering to the spot, on which such a miracle had been wrought, would naturally enough induce them to select its principal structure for that purpose. Be this as it may, the ruins of a solid building of five hundred feet must, if any traces of the city remain, be

the most remarkable object among them. Pliny, seventy years after Strabo, mentions "the temple of Jupiter Belus, the inventor of astronomy," as still standing; and all travellers since the time of Benjamin of Tudela, who first revived the remembrance of the ruins, whenever they fancied themselves near the site of Babylon, universally fixed upon the most conspicuous eminence to represent the tower of Belus. Benjamin of Tudela, Rawulf, and some others, saw it among the ruins of old Felugiah; and, fully bent upon verifying the words of Scripture, fancied it infested by every species of venomous reptile. If we take Rawulf's account,* indeed, he must in the 16th century have seen Babylon, nearly as perfect as it was in Strabo's time, and he has no kind of difficulty in pointing out the minutest divisions of the city. I believe Pietro della Valle was the first who selected the Mujelibè as the remains of this celebrated structure. Père Emanuel and Niebuhr are the only writers who have noticed the Birs Nemroud; and the former, from the account he has given, or the clearness of the idea he appears to have formed, might, with equal advantage to the world and himself, have never seen it.

Notwithstanding the apparent ease, with which this important point in the topography of Babylon has been determined, a careful examiner will find as great a difficulty in discovering the remains of the Tower of Belus, as in identifying any other part of

* Appendix, No. 12.

the ruins. Taking for granted the site of Babylon to be in the vicinity of Hillah, his choice will be divided between two objects, the Mujelibè, and the Birs Nemroud. I shall briefly notice the arguments in favour of each, with the difficulties and objections which may be advanced, first giving a comparative statement of their dimensions with those of the original tower :—

	English feet.
Total circumference or sum of the	
four sides of the Birs . . .	2286
Ditto of the Mujelibè . . .	2111
Ditto of the Tower of Belus, taking	
five hundred feet for the sta-	
dium, at a rough calculation .	2000

By this it appears, that the measurement both of the Birs and the Mujelibè agrees as nearly as possible with that of the tower of Belus, considering our ignorance of the exact proportion of the stadium, and the enlargement which the base must have undergone, by the crumbling of the materials. The variations in the form of the Mujelibè, from a perfect square, are not more than the accidents of time will account for; and the reader will best judge, from my description, whether the summit and external appearance of this ruin correspond in any way with the accounts of the tower. That there may have been some superstructure on it, appears probable, from the irregularity of the summit, and the quantity of burnt brick found there; but it is

impossible to decide on the form or extent of this superstructure, and it may be thought that there does not remain in the irregularities on the top a sufficient quantity of rubbish to account for an elevation equal to that of the tower, the whole height now being only one hundred and forty feet. To those who, from the traces of an enclosure somewhat resembling a ditch with a glacis, and the appearances of lanterns or turrets at one or two of the corners, would conjecture this to be the ruins of a castle, it must be objected, that the enclosure which we know surrounded the tower might leave just such traces; and indeed we observe perfectly similar ones in ruins, which we know never could have been castellated, as for instance, at the Birs, Al Hheimar, and Akerkouf; that the corners of the base of the tower may have been rounded off for ornament or use, and that the interior appearance and solidity of the ruin argue completely against its having been a castle. We have besides every reason to believe, that there never was a castle at Babylon, except the fortified palace; and the opinion of a few Turks, who call it the Kalâa, or citadel, is not worth noticing.

Of the grand enclosure of two miles and a half, which surrounded the temple and tower, and was probably the boundary of the sanctuary or holy ground, there are no traces here; and indeed such an inclosure would be incompatible with the boundary-line (A). The passage filled with skeletons, in

the Mujelibè, is a circumstance that will embarrass equally those, who may be of opinion it was a castle, and those, who judge it to have been the tower of Belus; though, probably, it would be more favourable to the theory of the latter, than that of the former. We gain nothing in this instance by studying position. Major Rennell considers this ruin as sufficiently answering to the site of the tower of Belus: he does not, however, establish its position from that of the other ruins, but assumes it, as a datum to ascertain the situation, and extent of the rest of Babylon.

The only building which can dispute the palm with the Mujelibè is the Birs Nemroud, previous to visiting which, I had not the slightest idea of the possibility of its being the tower of Belus; indeed its situation, was a strong argument against such a supposition; but the moment I had examined it, I could not help exclaiming, “Had this been on the other side of the river, and nearer the great mass of ruins, no one could doubt of its being the remains of the tower.” As this, therefore, is the principal objection that can be brought against it, it will be proper to consider it first.

I believe it is nowhere positively asserted that the tower of Belus stood in the eastern quarter of Babylon. Herodotus, Strabo, Pliny, and Quintus Curtius, do not affirm this, but it is certainly the generally-received opinion; and Major Rennell says, “It may be pretty clearly collected from Diodorus,

that the temple stood on the east side, and the palace on the west. A presumptive proof of the supposed position of the temple, should the words of Diodorus be regarded as ambiguous, is, that the gate of the city named Belidian, and which we must conclude to be denominated from the temple, appears pretty clearly to have been situated on the east side. When Darius Hystaspes besieged Babylon, the Belidian and Cissian gates were opened to him by Zopyrus; and the Babylonians fled to the temple of Belus, as we may suppose, the nearest place of refuge. The Cissian or Susian gate must surely have been in the eastern part of the city, as Susa lay to the east; and by circumstances the Belidian gate was near it."—*Geog. of Herod.*,* pp. 355–357. Now I do not think these premises altogether warrant the conclusion: in these countries, as has before been remarked,† gates take the names of the places to, and not from, which they lead; the gates of Babylon are instances of this; and the very gate next the Belidian was called Susian, from the town to which the road it opened upon led; so that if the Belidian gate really derived its appellation from the temple, it would have been a singular instance, not merely in Babylon, but in the whole East at any period. It is consequently much easier to suppose there may have been a town, village, or other remarkable place without the city, the tradition of which is

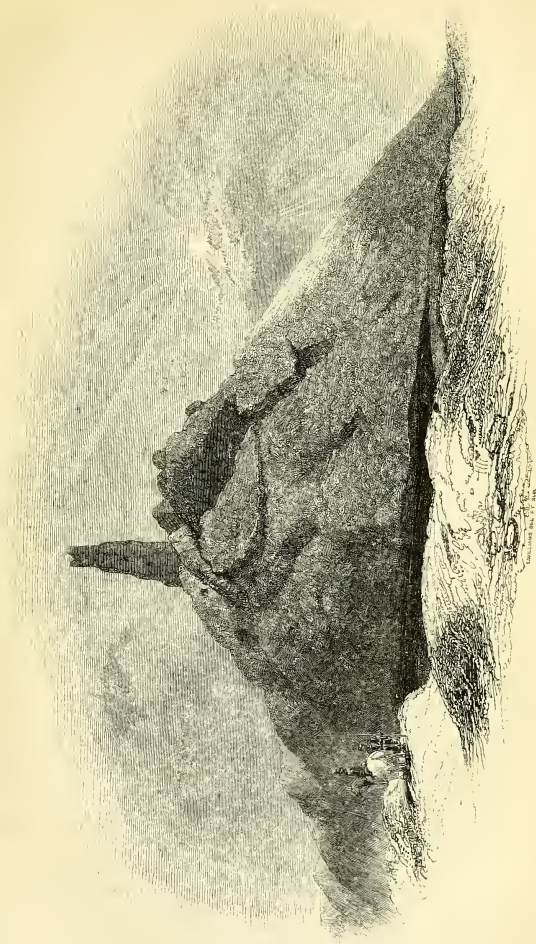
*Appendix.

† Vide also Rennell.

now lost, which gave its name to the gate, than that such an irregularity existed. As to the inhabitants in their distress taking refuge within the precincts of the temple, it is probable they were induced to it, not from its proximity to the point of attack, but as the grand sanctuary, and, from its holiness and great celebrity, the one most likely to be respected by the enemy.

The difficulty is, however, by no means vanquished, by allowing the temple and tower of Belus to have stood on the east side: a very strong objection may be brought against the Birs Nemroud, in the distance of its position from the extensive remains on the eastern bank of the Euphrates, which, for its accommodation within the area of Babylon, would oblige us to extend the measurement of each side of the square to nine miles, or adopt a plan which would totally exclude the Mujelibè, all the ruins above it, and most of those below: even in the former case the Mujelibè and the Birs would be at opposite extremities of the town, close to the wall, while we have every reason to believe that the tower of Belus occupied a central situation. Whether the Birs stood within or without the walls, if it was a building distinct from the tower of Belus, it appears very surprising how so stupendous a pile, as it must have been in its perfect state, never attracted the attention of those who have enumerated the wonders of Babylon.

The plan of the Birs varies more from a perfect



N. W. FACE, BIRS NEMROUD.



square than that of the Mujelibè, which may be accounted for, on the supposition of its having been in a state of ruin for a much longer period. I think from its general appearance there are some reasons to conclude it was built in several stages, gradually diminishing to the summit. The annexed sketch, in four different views,* will convey a clearer idea of it than any description would, and enable in some measure the reader to judge for himself.†

In forming a conjecture on the original destination of the Birs, the mound situated parallel to its eastern face, which must have been a building of great dimensions, must not be overlooked. The temple attached to the tower of Belus must have been a very spacious edifice, and formed part of its quadrangular enclosure, of which it is probable it did not occupy more than one side, the three remaining ones being composed of accommodations for the priests and attendants, of course inferior in proportions to the temple : allowing some degree of resemblance in other respects, between the Birs and the tower, the elevation observable round the former will represent the priests' apartments, and the above-mentioned mound, the temple itself. We find the same kind of mound, and precisely in the same situation, attached to other ruins which have a strong re-

* The original engravings of Mr. Rich's sketches of the ruins of Babylon were so badly executed at Vienna, that instead of re-publishing them, it has been judged more advisable to give one view of each ruin, more perfectly executed, from Mr. Rich's original drawings.

† See the accompanying Plate.

semblance in themselves to the Birs; and we may, therefore, reasonably conclude that they were intended for the same design, either the honour of the dead, the observation of the celestial bodies, religious worship, or perhaps some of these motives combined. In like manner we find in Egypt the original idea of the pyramids exactly copied at different times on a smaller scale, and each pyramid having its dependant temple. I leave to the learned the decision of this point, and the determining what degree of resemblance, in form and purpose, exists between the pyramids of Memphis and the tower of Belus.

I have dwelt the longer on this most interesting of the Babylonian edifices, as I shall have but little to offer on the rest. The citadel or palace (for it served both these purposes, and was the only fortress within the walls) was surrounded by an exterior wall of sixty stadia in circumference; inside which was another of forty stadia, the interior face of which was ornamented with painting, as is the custom of the Persians at the present day; and again, within this last was a third, adorned with designs of hunting. On the opposite side of the river, and on the same side with the tower of Belus, was situated the old palace, the outer wall of which was no larger than the inner one of the new. Above the new palace or citadel were the hanging gardens, which, according to Strabo, formed a square of four plethra each face, and were fifty cubits in height. When I

consider the dimensions of the Sefivieh palace at Isfahaun, and other similar buildings yet remaining in the East, I see no difficulty in admitting the account of the Babylonian palace in its full extent. The antiquarian will consider how far the measurement of the ruins enclosed between the river and the boundary on the east corresponds with those of the palace: in some respects the Mujelibè would answer sufficiently well with the accounts of the hanging gardens, were it not for the skeletons found there, which must embarrass almost any theory that may be formed on this extraordinary pile.

There was a tunnel under the Euphrates, of which no trace can reasonably be expected at this time. Semiramis, according to Diodorus, erected a stone obelisk of a hundred and twenty-five feet high by five feet square, which was cut on purpose in the Armenian mountains. As we do not trace this monument in any of the neighbouring towns after the destruction of Babylon, it is not impossible that some vestige of it may yet be discovered.

I have already expressed my belief that the number of buildings in Babylon bore no proportion to the space enclosed by the wall: besides this, it is most probable that the houses were in general small; and even the assertion of Herodotus, that it abounded in houses of two and three stories, argues that the majority consisted of only one. The peculiar climate of this district must have caused a similarity of habits and accommodation in all ages; and if upon

this principle we take the present fashion of building as some example of the mode heretofore practised in Babylon, the houses that had more than one story must have consisted of the ground-floor or *basse-cour*, occupied by stables, magazines, and serdaubs or cellars, sunk a little below the ground, for the comfort of the inhabitants during the heats; above this a gallery with the lodging rooms opening into it, and over all the flat terrace for the people to sleep on during the summer.

From what remains of Babylon, and even from the most favourable account handed down to us, there is every reason to believe that the public edifices which adorned it were remarkable more for vastness of dimensions than elegance of design, and solidity of fabric rather than beauty of execution. The tower of Belus appears merely to have been astonishing from its size. It was inferior in some respects to the pyramids, and did not surpass either them or probably the great temple of Mexico in external appearance; and the ornaments of which Xerxes despoiled it, convey an idea of barbaric richness, rather than taste: all the sculptures which are found among the ruins, though some of them are executed with the greatest apparent care, speak a barbarous people. Indeed with a much greater degree of refinement than the Babylonians seem to have been in possession of, it would be difficult to make any thing of such unpropitious materials as brick and bitumen. Notwithstanding the assertion

of M. Dutens, there are the strongest grounds for supposing that the Babylonians were entirely unacquainted with the arch, of which I could not find the slightest trace in any part of the ruins where I purposely made the strictest search ; particularly in the subterranean at the Kasr, and the passages in the Mujelibè. The place of the column too appears to have been supplied by thick piers, buttresses, and pilasters ; for to the posts of date-wood, which was then and is still made great use of in the architecture of this country, the name of *pillar* certainly cannot with propriety be applied. Strabo says, "On account of the scarcity of proper timber, the wood-work of the houses is made of the date-tree ; round the posts they twist reeds, on which they apply a coat of paint."* What Xenophon and Strabo say of the doors being smeared over with bitumen, I understand to be meant of the naphtha oil, with which they at present varnish all their painted work ; the reasons for covering a door with bitumen not being so obvious. When any considerable degree

* It is curious to compare the account Strabo gives, lib. xvi. p. 511, of the uses to which the Babylonians applied the date in his time, with the practice of the present day. He says, the date furnished them with bread, honey, wine, and vinegar ; the stones supplied the blacksmiths with charcoal ; or, being macerated, afforded food for cattle. The peasantry now principally subsist on dates pressed into cakes ; they prepare molasses (dibs), make vinegar, and distil a spirituous liquor called Arrak from them ; but of the two latter uses mentioned by Strabo they are ignorant. Oil of sesame is still the only sort used, either for eating or burning, as in the time of Strabo.

of thickness was required, the way of building was to form an interior of common brick or rubbish, cased with a revêtement of fine brick ; there are traces in the ruins which justify this opinion ; and in this manner the tower of Belus (which Herodotus calls *πυργὸν στερεὸς*), the city walls, and other buildings of that description, seem to have been constructed.

We find two kinds of brick in Babylon, the one burned in a kiln, the other simply dried in the sun. I cannot refrain in this place from offering a few remarks on Gen. xi. 3, where concerning the building of Babel it is said *וַיֹּאמְרוּ אִישׁ אֶל־רֵעֵהוּ הָבָה נִלְבְּנָה לִבְנִים וְנִשְׂרָפָה לְשִׂרְפָּה וַתְּהִי לָהֶם הַלִּבְנָה לְאַבְנֵי וַתִּהְיֶה חִמָּר לָהֶם לְחִמָּר*. Our translation is : “ And they said one to another, Go to, let us make brick and burn them thoroughly : and they had brick for stone, and slime had they for mortar.” This is incorrect. The Chaldee paraphrast has *וַיִּקְרָא וַתְּהִי לָהֶם לְבִינָתָא לְאַבְנָא וַיִּחְמָרָא הָחָד לָהֶם לְשִׁיעַ*. According to Buxtorff, and indeed the sense it still bears in these parts, *חִמָּר* means cement, and *חִמָּר* bitumen ; so that the Vulgate is correct in saying : “ Dixitque alter ad proximum suum, Venite, faciamus lateres et coquamus eos igni ; habueruntque lateres pro saxis, et bitumen pro cemento.” I have not a Polyglot to consult, and therefore am not able to trace the error in our version higher than to Luther’s German one. It is true Castell translates *חִמָּר* *limus, lutum*, in Gen. xi. 3, and *bitumen* in Exod. ii. 3. This is extraordinary : for, of the two, the context of

the latter passage would appear rather to justify the former reading, to avoid the seeming tautology between זפת and חמר. I conclude he must have taken the common translation of the Bible as sufficient authority, without further examination; for he allows the Chaldee word חמר (Targ. Gen. xi. 3) to signify bitumen, in direct opposition to his definition of the corresponding Hebrew word. לִבְנָה signifies *brick*, of course the burnt sort from its root; and both Golius and Castell, perhaps relying too much on the Hebrew derivation, translate the Arabic word لبى *burnt brick* also. Nevertheless it is now exclusively applied by the Arabs to the brick merely dried in the sun.

The general size of the kiln-burnt brick is thirteen inches square, by three thick: there are some of half these dimensions, and a few of different shapes for particular purposes, such as rounding corners, &c. They are of several different colours; white, approaching more or less to a yellowish cast, like our Stourbridge or fire brick, which is the finest sort; red, like our ordinary brick, which is the coarsest sort; and some which have a blackish cast and are very hard. The sun-dried brick is considerably larger than that baked in the kiln, and in general looks like a thick clumsy clod of earth, in which are seen small broken reeds, or chopped straw, used for the obvious purpose of binding them: in like manner the flat roofs of the houses at Bagdad are covered with a composition of earth and mortar

mixed up with chopped straw. At the Birs Nemrout I found some fire-burnt bricks, which appeared to have had the same materials in their composition. The best sun-dried bricks I ever saw, are those which compose the ruin called Akerkouf.

There are three kinds of cement discoverable in the ruins of Babylon ; bitumen, mortar, and clay. I am inclined to think the former could never have been of such very general use as is commonly imagined ; we now only find it in a few situations (not always such as indicate the reason for which it was used), except the small pieces of it which are found on the surface of the mounds. Though the fountains at Heet are inexhaustible, the Babylonians had nearer at hand a much better cement, the discovery of which was a very obvious one ; and the richness of the ruins in nitre is some proof that lime-cement was the one most generally employed. The preparation necessary for the bitumen is a much more expensive and troublesome one than that requisite for lime, for the commoner sort of which a simple burning with the brambles, which abound in the Desert, is sufficient ; while the bitumen, to deprive it of its brittleness, and render it capable of being applied to the brick, must be boiled with a certain proportion of oil ; and after all, the tenacity of the bitumen bears no comparison with that of the mortar. The bricks which Niebuhr mentions as being so easily separated, were all laid in bitumen ; and I invariably found that when this was the case, as above the sub-

terranean passage in the mound of the Kasr, the bricks could be picked out with a small pickaxe, or even trowel, with the utmost facility; but where the best mortar has been used, as at the Birs, no force or art could detach the bricks without breaking them in pieces.

There are two places in the pashalick of Bagdad where bitumen is found: the first is near Kerkouk, and too remote to come under present consideration; the next is at Heet, the Is of Herodotus*, whence the Babylonians drew their supplies. Heet is a town situated on the Euphrates, about thirty leagues to the west of Bagdad, inhabited by Arabs and Karaite Jews. The principal bitumen-pit has two sources, and is divided by a wall in the centre, on one side of which the bitumen bubbles up, and on the other, oil of naphtha; for these two productions are always found in the same situation. That kind of petroleum, called by the Orientals Mumia, is also found here, but of a quality greatly inferior to that brought from Persia. Strabo, who calls the naphtha *liquid bitumen*, says its flame cannot be extinguished by water, and relates a cruel experiment made by Alexander, to prove the truth of this, the result of which, however, is in direct contradiction of it. I

* "Eight days' journey from Babylon is a city named Is, near which runs a small river of the same name, discharging itself into the Euphrates: this river brings down with its waters clots of bitumen (asphaltum) in large quantities. From this source was derived the bitumen used in cementing the walls of Babylon."—Isaac Taylor's Trans. of Herodotus, Book 1st, sec. 12, p. 85.

believe it is Diodorus alone who asserts that bitumen flows out of the ground at Babylon. Herodotus positively says it was brought from Heet, and Strabo, generally, that it is produced in Babylonia. I was unable to discover any traces of it in the vicinity of Hillah, except on the testimony of a Jew, who told me he believed it might be found in the Desert. It is at present used for caulking boats, coating cisterns, baths, and other places that are to remain in contact with water. The fragments of it scattered over the ruins of Babylon are black, shining, and brittle, somewhat resembling pit-coal in substance and appearance; the Turks call it *Zift*, and the Arabs, *Kier* or *Geer* (قير).

There are three kinds of calcareous earth found in most situations in the western desert between Babylon, Heet, and Ana. The first is called *Noora*, and is a white powder particularly abundant at Heet and Ana. Mixed with ashes it is used as a coating for the lower parts of walls, in baths and other places liable to damp. The second is also found in powder, mixed with indurated pieces of the same substance, and round pebbles: it is called by the Turks *Kárej*, and by the Arabs *Jus*; it is very plentiful between Hillah and Felugiah, is the common cement of the country, and composes the mortar which is found in the ruins of Babylon. The third species, called *Borak*, is a substance resembling gypsum, and is found in large craggy lumps of an earthy appearance externally, but being burnt it forms an excellent

whitewash or plaster. I have seen some mortar in Babylon of a reddish appearance, as if clay had been mixed with it; and there yet remains another kind of cement to be spoken of, viz. pure clay or mud, the use of which is exclusively confined to the sun-dried brick; and it is indeed a very imperfect cement, notwithstanding the great thickness in which it is laid on. At the Mujelibè, layers of reeds are found on the top of every layer of mud-cement, between it and the layer of brick: the use of the reeds (which are the common growth of the marshes) is not very obvious, unless it be supposed that they were intended to prevent the bricks sinking unequally and too speedily into the thick layer of mud; they are in a surprisingly perfect state, and handfuls of them are easily drawn out. I never saw any reeds employed where any other kind of cement was used. Herodotus asserts that the tops of them are intermixed with the bitumen, and I have certainly observed on pieces of bitumen impressions like short pieces of reed, though not a fragment of the reeds themselves (if there ever were any) remains; and from subsequent observations I am inclined to think such appearances might proceed from other causes. In the mud-cement of the walls of Ctesiphon there are layers of reeds as at Babylon, and I believe they are also to be found among the ruins of Seleucia, the builders of which would naturally have copied the peculiarities of the Babylonian

architecture, and have been imitated in their turn by their Parthian neighbours.

I have thus given a faithful account of my observations at Babylon, and offer it merely as a prelude to further researches, which repeated visits to the same spot may enable me to make. My wish to be minutely accurate has, I fear, often betrayed me into tediousness ; but the subject is a curious, perhaps an important one, as it may tend to illustrate several passages in the sacred and profane writers. Instead of being disappointed at the difficulty of ascertaining any part of the original plan of Babylon, from its present remains, we ought rather to be astonished at the grandeur of that city which has left such traces, when we consider that it was nearly a heap of ruins two thousand years ago ; that immense cities have been built out of its materials, which still appear to be inexhaustible ; and that the capital of the Abassides, which we know to have been one of the most extensive and magnificent cities of comparatively modern times, has left but a few confused vestiges, which are scarcely elevated above the level of the Desert, and which in a few years the most inquiring eye will be unable to discover.



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Here the ruins commence.

(A.)
SECRET
of the State of
ANCIENT BABYLON

chiefly from the *Information contained*
in the Memoir of Claudius Ritz Esq.
by James Henwell.



Explanation

- A. *Mound of the Bear*, or *Principal Palace*.
- B. *Mound of Jinnu*.
- C. *Mound of the Enlightenment*.
- D. *Northwestern Mound*, or *Leaver Palace*.
- E. *The Red Mound*.
- F. *An ancient course of the Euphrates*.
- G. *A building remaining in it*.
- H. *Supposed ancient course of the Euphrates*, between the *Mounds of the supposed Palace*; &c.

EX. It is suspected that the Variation, 9 or 10 degrees West, is not allowed in W. Pick's Plan.

Lat. $32^{\circ} 26'$
 Lon. $41^{\circ} 0.45$
 East from Greenwich
 116 bears about 50° from
 from Macleod; distant
 about 53 strong. Shales

All Times Run
5 or 6 miles to the east
of Hildah.

Nimrod Birds:
or Tower of Nimrod

Known general course

*See W.
istant
libey*

ON THE
TOPOGRAPHY OF ANCIENT BABYLON;

SUGGESTED BY THE
RECENT OBSERVATIONS AND DISCOVERIES OF
CLAUDIUS JAMES RICH, Esq.

BY
MAJOR RENNEILL.

COMMUNICATED TO THE SOCIETY OF ANTIQUARIES.

Read before them 14th and 21st December, 1815; published in the
"Archæologia," vol. 18; and reprinted here by their obliging permission.

ON THE
TOPOGRAPHY OF ANCIENT BABYLON,
&c. &c.

[It may be proper to observe, at the outset, that references are made to two distinct plans : the one, of the great central ruins by Mr. Rich ; the other, a sketch, made by the Author of the Paper. This latter includes the entire site of what is taken for Ancient Babylon. The former is always referred to, as the Plan ; the latter, as the Sketch. The letter-press referred to is always that of Mr. Rich's Memoir.]

THE very interesting Memoir of Mr. Claudius Rich, on the remains of Ancient Babylon, having a tendency, as well from the facts set forth in it, concerning the present state of the site of that city, as from his reasonings on them, to occasion doubts respecting the established opinions that have been entertained, on the authority of the ancient historians, it appeared to be almost a required duty from myself to the public, as having already written on the subject, to vindicate the consistency and truth of ancient history ; (as well as that of my own statement, which was conformable to it;) for if all the remains of Ancient Babylon are found on one and the same side of the Euphrates, as Mr. Rich reports them to

be; either that river must have altered its course in that particular place, or the statements of the ancients must be wrong.

But, independent of this motive, I really wish to place the very interesting and curious facts brought to our notice by Mr. Rich's researches in the clearest and most useful point of view; so as to endeavour by their aid, to develop on the site itself, the general extent of this highly-ancient city, and the distribution of its principal structures, as set forth by the above-said ancient authorities: for Mr. Rich appears to have employed much time, labour, and expense on the occasion; to have entered on his researches without prejudice; to have prosecuted them with much zeal; and finally, to have reported them faithfully. He is indeed the first person who has given any correct ideas concerning the nature of the remains, and in what they consist; and has given more particulars concerning the remains of the supposed Tower of Belus, than Della Valle or Beauchamp; who appear to have viewed them in too hasty a manner, to be enabled to furnish a detailed description.* He gives also some new information, respecting the general position, and

* It is true that M. de Beauchamp says, "the ruins extend several leagues to the north of Hillah, and incontestably mark the situation of Ancient Babylon;" but this is so vaguely and indistinctly given, that the idea has been applied, exclusively, to the Mujelibè, and the other mounds near it. M. de Beauchamp does not appear to have observed the mounds between the Mujelibè and Mohawill.

extent of the remains of Babylon, at large :^{*} and in his account of the Nimroud Birs, or Tower of Nimrod, he presents a subject, which, in point of description, is perfectly novel ; although its name and position had been long known, from the travels of the celebrated M. Niebuhr.

But Mr. Rich, having entertained a suspicion that the Tower of Nimrod was the representative of that of Belus, appears to have given up the advantages of

^{*} The details concerning those remains will be found in p. 48 and p. 62, and seq. of the Memoir of Mr. Rich.^a

In the line between Mohawill and Hillah, which is supposed to pass through the centre of the area of Ancient Babylon, from north to south,^b traces of buildings are discovered in detached mounds of rubbish, strewed with the fragments of bricks and bitumen, through a space of about nine miles.

Towards the centre of this space, besides a remarkable ruin, taken for that of the Tower of Belus, mounds of vast magnitude and extent are seen, formed of the ruins and decomposed materials of buildings ; all of which have been dug into, more or less, in search of bricks ; and have their surfaces strewed with fragments of brick, bitumen, and pottery ; and are deeply furrowed by channels, made by the running off of the rain-water.

One of these mounds in particular appears to be composed of the remains of buildings, far superior to all the rest, by the fineness of the bricks, and the goodness of the lime mortar : and the surface has on it, in addition to the substances generally found on the other mounds, fragments of alabaster vessels, fine earthenware, marble, and great quantities of varnished tiles. And notwithstanding that in latter times the greatest supplies of bricks have been drawn from this mound, they appear still to be abundant.

It is conceived that the mound in question contains the ruins of the Great Palace described by Herodotus and Diodorus.

^a The references to Mr. Rich's Memoir, as they were given in the original publication of Major Rennell's Paper upon it, were made to the first edition of that Memoir. In the present republication of both the references are corrected accordingly.—ED.

^b See the accompanying Sketch.

a part of his discoveries, and has thereby left the principal matter to float in uncertainty. With a knowledge of the northern and southern extremities of the general remains, and of the position of the Mujelibè (the Tower of Belus of Della Valle and Beauchamp), in the centre of them, much might have been done towards the progress of development of the general plan and extent. Perhaps, had he adverted to the circumstance of a small change of course of the Euphrates, through the ruins, the prominent objects would have appeared to him to fall at once into their proper places; and with a conviction of the identity of the Mujelibè with the Tower of Belus, which might immediately have followed, he might have been encouraged to proceed from it, as from a centre, in order to search after the places of the exterior walls and ditches; which being once found, even in part only, would set the general question of site and extent fully at rest.

It appears to me, that in the act of considering the site and distribution of the remains of this ancient city, two circumstances arise, that must not be lost sight of: the one, the probable change of course of the river; the other, that the whole of the remains, visible in the form of mounds, &c. do not belong exclusively to the ancient city, but in part to a subsequent establishment, not recorded in history, and perhaps of a date previous to the Mahomedan Conquest; for it is difficult to reconcile the circular, and other mounds of earth, with the de-

scription of the regular distribution of streets, in Ancient Babylon.*

Two minor points of difference will appear, between the received accounts of the ancients, and the facts, as they appear from the report of Mr. Rich. The one, that the Tower of Belus and the principal palace could not have stood opposite to each other, in respect of the general course of the river ; and the other, that the base of the Tower of Belus was not a square, but a parallelogram.

It would, no doubt, be begging the question, to assume, in the first instance, that the Euphrates had changed its course ; and that it once ran through the narrow space between the mound of the Kasr,† and the mass of ruins situated to the north-eastward of it ; unless I first brought forward some kind of evidence to show the probability of it ; as that the several particulars of the remains on the site required only the presence of the river, in a particular line of course to complete the general description, given by the ancients ; and that such a change of course appears likely to have taken place : for instance, that the Mujelibè really occupies a central position, amongst the extensive remains, which may be taken for those of Ancient Babylon, as the Tower of Belus did, in former times, in the existing city ; that the same

* See the accompanying Plan of the site of the principal remains of Babylon, by Mr. Rich ; as also the Sketch of the general extent of those remains, and of the supposed change in the course of the Euphrates.

† See again the Plan of Babylon.

Mujelibè may well pass for the remains of that tower ; and that two mounds or masses of ruins, that appear on the Plan, may be taken for those of the two palaces, described by Diodorus ; only that the river does not separate them, as the history describes, the narrow space between the mounds now forming a part of the plain ; for, as I have said, according to the plan of the ground, and principal remains, by Mr. Rich, (and which I can have no doubt are strictly conformable to the truth,) all the remains are on the same side of the Euphrates ; that is, the eastern side ; (for I lay out of the question, at present, the Nimroud Birs, which is about $8\frac{1}{2}$ miles distant from the Mujelibè). Therefore, if the Euphrates has not changed its course, in a small degree, the ancients, who have left accounts of the arrangement and distribution of the principal structures in Babylon, have only been amusing us with fairy tales !

I shall now proceed to state certain facts, collected from Mr. Rich's Memoir and Plan, (in which they are very fairly set forth,) in order to show the probability of a change of course of the river ; which has now left all the principal remains on the eastern side ; although the principal palace, and the hanging gardens certainly stood on the opposite side to the Temple and Tower of Belus.

Mr. Rich states (p. 48) that in his way from Bagdad towards Hillah, (in a southerly direction,) he came to Mohawill, a Khan, or Caravanserai ; " close

“ to which, is a large canal with a bridge over it :
 “ beyond this, every thing announces an approach to
 “ the remains of a large city. *The ruins of Babylon*
 “ *may in fact be said almost to commence from this*
 “ *spot ; the whole country between it and Hillah*
 “ *exhibiting, at intervals, traces of building, in*
 “ *which are discoverable burnt and unburnt bricks*
 “ *and bitumen* : three mounds, in particular, attract
 “ attention, from their magnitude.”——“ Hillah is
 “ nine miles from Mohawill*.”

He also says (p. 68) that “ at a mile distant from
 “ the north of the Kasr” (taken for the remains of the
 principal palace), “ and full five miles distant from
 “ Hillah, is the *Mujelibè*.” As this latter is known to
 lie nearly in the direct line between Mohawill and
 Hillah, it must of course be about four miles distant
 from the former. (His detail, however, referring to
 p. 58, and to the Plan, gives rather $4\frac{3}{4}$ miles than
 five from Hillah ; leaving of course, $4\frac{1}{4}$ miles to
 Mohawill.) But taking it either way, the *Mujelibè*
 falls within a quarter, or half a mile, of the *middle*
point of the space occupied by the heaps of ruins,
 and which, as we have seen, is nine miles in length ;
 that is, somewhat within the extent allowed by

* This description of traces of buildings, occurring at intervals,
 appears to agree with the ancient accounts of Babylon—that the
 ground inclosed by the walls was only partially built on. The heaps,
 no doubt, are made up of decomposed bricks, bitumen, and mortar,
 the whole bricks having generally disappeared, in places where they
 were easily got at ; and from the nature of the cement used, (that is,
 bitumen,) easily separated.

Strabo to the square of Babylon, but somewhat more than what Diodorus gives, from Ctesias and others. But niceties are out of the question here, where all is from computation and judgment, and not from actual mensuration.

Mr. Rich has mentioned a large canal at Mohawill. This is also remarked by other travellers ; but without combining with it the circumstance of the *commencement of the ruins* near that place. Admitting these to be, as Mr. Rich concludes, a part of the remains of Ancient Babylon, what is more probable than that the canal should be the exterior fosse of that city ? The line of direction of the canal is not mentioned, but ought to be inquired into ; as also, whether there be a mound on that side of it, towards the site of Babylon ; which might be expected, if the line of direction agreed. But, at all events, the traces of the wall and ditch may probably be looked for near the place of commencement of the ruins.

The Mujelibè, then, may be allowed to occupy such a general position amongst these remains ; admitted by Mr. Rich, to be those of Ancient Babylon ; as the Tower of Belus did, in the ancient city itself.

I shall not trouble this learned Society with quotations from Della Valle, Beauchamp, and Rich, containing descriptions of the Mujelibè, as they are so easily referred to, and would therefore swell the paper unnecessarily. It may suffice to say, that according to every description, and more particu-

larly to that of Mr. Rich himself, including his excellent drawings of it, the ruin presents very much the appearance of being the remains of such a structure, as the descriptions of the Tower of Belus would lead us to expect. Not that, had we only viewed the ruin, and had been ignorant of the reports concerning its ancient form, one could have guessed it to have been such as it was described: but that, knowing the original form, one may reconcile to his mind that it may well be the remains of such a structure.* That the matter of the upper stories is wanting, may with ease be accounted for. The principal mass was probably formed of *sundried* bricks, with a *coating* of those *baked* in the *furnace*. The latter have been removed for use; the former dissolved by rain, or carried away by the winds, in a pulverised state (being nothing more than earth); for this tower was in ruins so long ago as the date of Alexander's visit, when it was said, that it would require the labour of ten thousand men, during two months, to remove the rubbish. The deep channels, made by the running off of the rain-water, with which it is every where deeply furrowed, prove how much it has been acted on by the rain; and most of all, on the western side, which is the most exposed to the prevalent rainy winds. And this surely tends

* See the drawings of its four fronts, at the end of the Memoir of Mr. Rich.—*Rennell*. This reference is to the first edition of the Memoir, published by Messrs. Longman & Co., 1818. See note, page 89, of the first Memoir in this volume.—ED.

to prove that the mound must have been artificial; for the quantity of rain-water that could possibly fall on so limited a space as the area of the mound, would not have worn away a natural hill in so great a degree.*

Little more, therefore, need be said in respect of the probability of this venerable ruin being the Tower of Belus; of a date possibly that may remount almost to the earliest period of post-diluvian history. But although Mr. Rich's description affords full conviction, our curiosity is by no means yet satisfied.

It is very possible that a part of the remains of the external walling now seen may be of a date long subsequent to that of the erection of the Tower. The semicircular mound of earth, described by Mr. Rich (page 58), and which embraces the principal remains, within a diameter of about $2\frac{1}{2}$ miles, appears to have been the rampart of a *new* Babylon, of reduced dimensions, but of whose history we know nothing. It may clearly be seen by the *Plan* and description (p. 17), that the termination of this rampart, northward, *points d'irectly towards* the south-eastern angle of the Mujelibè, (and appears to have actually joined it, according to Mr. Rich's account,) thus making it serve the purpose of a *Bastion, Place*

* It must certainly be taken into the account, that the ground adjacent to this ruin must have been raised by the matter washed down from it by the rain; particularly on the west side. Yet the south-east angle is still more than 140 feet above the plain. The height of the other parts we are not told. Much more is required to be known concerning it.

of Arms, or Citadel; and it was by no means a bad design. The rampart was doubtless extended to the river bank, wheresoever it might have been at that time, as on the opposite side of the circle. Now, I have an idea, that when the Turks call the Mujelibè the *Kalaa*, or Citadel, they allude to the use that had latterly been made of the ruin, in the state it then was, and which had been handed down by tradition. And hence, there may have been some alterations introduced, in order to adapt it the better to its new character.

It appears pretty certain from the dimensions of the ruins, that the Tower (admitting the Mujelibè to be such) could never have been raised on an *equilateral* base; since accident cannot be supposed to have occasioned such a difference between the length of the sides that face the north and south, and those that face the east and west, and which have, at a mean, a difference of about one-fourth part. So that the ruin is a *parallelogram*, whose longest sides lie east and west. This is a circumstance quite unexpected, and serves to show that Herodotus took for granted that it was equilateral; as he did, that the Great Palace and Tower of Belus stood directly opposite to each other, across the river: for which latter mistake, however, some excuse may possibly be offered.* As the circumference of the Tower appears to have been nearly about four stadia, (that is, in its

* That is, if the river had, at the time he saw it, deviated from its straight course through the city, or had not originally been made so.

present ruined state, it is 2111 feet, by Mr. Rich's account, page 88,) perhaps Herodotus and others contented themselves with that result, and *concluded* that the sides were equal.*

With respect to the coffins and skeletons found in the kind of gallery that runs along its northern face, I confess I have no opinion to offer. It is possible that the coffins may not be of a very early date, but that the gallery or passage of the Tower had been converted into a place of sepulture. (See the Memoir, pages 70 and 71.)

The two *straight* mounds of earth running parallel to each other, towards the middle part of the circular inclosure, are also, no doubt, of a later date than that of Ancient Babylon. Their use it may be difficult to discover, unless they were dams to prevent inundations of the river, if ever it took its course in that direction. The termination of one of them in a vast heap, of a curious red colour, will be spoken of afterwards.

I shall next consider the position of the remains, which may be taken for those of the palaces; first stating what has been said on the subject by the ancients.

Herodotus describes only *one* palace; Diodorus,

* See the Memoir of Mr. Rich, pages 68 and 88. The base must confessedly be larger *now* than in its original state, and yet it is no more in circumference than 2111 English feet: consequently, in its *present* state, it would give no more than 528 English feet to the stade; and probably, in its perfect state, less than 500. The stade of Strabo was about 530.

two ; that is, the *principal* one, on one side of the river, and the *lesser* one, on the other side ; the two communicating with each other by a *bridge* above, and by a *tunnel* under the river's bed. Probably, the palace mentioned by Herodotus may be the same with the *principal* one spoken of by Diodorus ; whence the latter should have been on the same side of the river with the Temple and Tower of Belus, and which I have formerly ventured to suppose, in common with M. D'Anville and others, to have been situated on the *east* side : for it appeared to me to be strongly implied in Diodorus, and yet stronger in Herodotus, where the *Belidian* gate is evidently placed in the eastern side of Babylon. And I confess I do not perceive a more plausible reason for the name, than that of its being opposite to so famous a structure, although it be more common in all countries to name the gates of a city or fortress from the distant places to which they lead, than to any object within. But gates have also *proper names*, without any reference to communications.

Herodotus assigns to the Temple of Belus and to the palace the central part of each of the two divisions of Babylon made by the passage of the Euphrates ; or rather, they might be said to have occupied a central position in that quarter of each division situated towards the river. Diodorus places the temple in the centre, but is silent respecting the positions of the palaces ; only saying that the bridge was built over the *narrowest* part of the river, and

the palaces at each end of the bridge. As we cannot but admit the existence of *two* palaces after the circumstantial details respecting them, a doubt arises whether the temple or the palaces occupied the centre! In this uncertainty, it may perhaps be allowable to place the temple and tower in the centre, since Herodotus and Diodorus are agreed in that point; and accordingly regard the Mujelibè as that centre, although it be of no particular import, in the present deficient state of our information, which of the two is adopted.

According to the Plan and description of Mr. Rich, in which all the remains are on the same side of the river with the Mujelibè, there cannot, of course, be any ruins opposite to it, to answer to the principal palace; but, on a supposition that the river has altered its course, such remains are to be found, though not *in front* of the Mujelibè, as Herodotus reports of the temple and tower.

Four mounds (besides the Mujelibè), constituting the principal remains of Ancient Babylon, appear on Mr. Rich's Plan, three of which only he has described in his Memoir; and of these, the one named from the *Kasr or Palace* (meaning the *principal* palace) is supposed by him, very justly, in my opinion, to answer to the remains of that structure. This opinion is grounded on the vast extent of the ground-plan, the solidity of the walls, and the superior quality of the materials and workmanship, together with various articles and fragments of utensils

that have been found there, indicating the residence of persons of a superior class. (See the Memoir, pages 65 and 66).^{*} This, however, is to be understood to relate to the mound itself, and not to the *ruin* named *Kasr*, concerning which more will be said in the sequel.

Now this mound is situated at a full mile to the southward of the Mujelibè; and although the *general course* of the river in this quarter is between the S.S.E. and S.E. by S.† (in which direction one may conclude it was conducted through the artificial cut said to have been made by Semiramis), yet still the mound in question could not have been less than *three-fourths of a mile* below the point opposite to the Mujelibè, the supposed Tower of Belus. Consequently, there being no other remains whatsoever in that quarter, the statement of Herodotus, respecting the relative positions of the temple and palace, must be erroneous; and that of Diodorus, probably more exact, when he places the temple and tower in the centre, and the palaces in some other situation, where

* M. de Beauchamp says, "Black stones, with inscriptions engraved on them, are also met with" there. One of these, a species of jasper, so well polished and so distinctly engraved, that it printed like a copper-plate, was sent home by Sir Harford Jones. It is in the possession of Sir Hugh Inglis.

† The present course of the Euphrates through the ruins is southwardly. It is not known whether Mr. Rich allowed the variation of the magnetic needle in his Plan. This may be about 9 or 10 degrees westerly in that quarter. So that if it be not allowed, the *north* of the Plan must be reckoned N. $9\frac{1}{2}^{\circ}$ W.

they were of course opposite to each other, being joined together by the bridge.

But in order to admit this mound of the Kasr to be the remains of the great palace, a change of course of the Euphrates must necessarily be admitted also. And this is surely more probable than that the ancient authors should have been so greatly mistaken, especially when the disposition of the several objects on the site is such as that it only requires the presence of the river to complete the description. A change of five or six times the breadth of the river is all that is contended for ; and even now there may be traced on the Plan an ancient bed of the river, which it probably filled on its departure from its supposed line of course between the mounds ; and which bed it appears to have afterwards deserted for the one it now occupies, the river continuing to this time to verge to the westward in that place ; and for this we have the testimony of Mr. Rich (page 59).

To those accustomed to study on the spot the wandering courses of rivers, and the effects often produced on their banks in alluvial soils, nothing is more familiar than such changes ; especially when, as in the present case, they are obstructed by the ruins of a bridge, and subject to be in part choaked up by the falling in of ruins from their banks, and by the continual washing down of the finer parts of the rubbish. In the course of my observations, I have found that no cause operates more powerfully in diverting

the courses of streams than fallen ruins.* More will be said respecting this ancient river-bed in the sequel.

Admitting, then, so probable a change, I shall beg leave to consider the mound that lies immediately to the north-east of the Kasr as the remains of the *lesser* palace, which was separated from the other only by the river and bridge. The space indeed between the two mounds is at present not much more than two-thirds of the breadth of the Euphrates (as given by Mr. Rich at 150 yards, page 53), but may have been reduced by the just mentioned accidents.† The *direction* of the opening is also favourable to the supposition of a change.

Mr. Rich has either not yet examined or has not prepared any account of this north-eastern mound. To judge from the Plan, it seems as if it were flatter or less prominent than the others, as if the materials were more decomposed from time. The only circumstance given, that applies to any part of it, is the following, which respects a vast mass lying in a line with, and at the northern termination of, one of the two long mounds before mentioned, and which Mr. Rich appears to regard as a portion of it:—He calls it (page 60) “a high heap of rubbish of a “curious red colour, nearly 300 yards long and 100

* Signor Balbi, in his navigation down the Euphrates in 1759, found the navigation very much impeded by the ruins of buildings fallen into the river above Annah.

† He says that the breadth of the river varies in its course through the ruins. On the Plan it is commonly 200 yards.

“ broad, terminating on the top in a ridge.* It has
“ been dug into, in various parts ; but few or no fine
“ whole bricks have been found in it.” This, one can
only regard as a vast mass of decomposed red bricks ;
and if the decomposition be the effect of time, it
would imply that the lesser palace (if of such this
may be taken for a part) is of much higher antiquity
than the other.

From the scanty notices given respecting the
southern mound, or Mound of Amran, it is difficult
to form an opinion whether it did or did not originally
constitute one mass with that of the Kasr, and that
the *low space* between them “ covered with rank
“ grass, and crossed by a line of ruins of *very little*
“ *elevation*”† (see page 62), has not been reduced to
that state by the action of the Euphrates in varying
its course through it, from one side of it to the other,
at different periods ; or at least that those mounds
approximated towards each other more than at pre-
sent : for doubtless the *southern* mound of the Kasr
looks in the Plan as if it had been worn away by the
stream, as the *western* side evidently does, as having
formed one of the banks of the *deserted* bed of the
same river. Again, the northern side of the Mound
of Amran appears also to have been acted on by the
stream. I conclude that these operations took place

* As Mr. Rich had no opportunity of correcting the press, it is possible that the numbers may be wrong. They evidently appear to be so in some parts of the Memoir.

† A part perhaps of too great solidity for the stream to dissolve or to remove.

previous to the formation of the *circular rampart*, and that the long mound on the west, which connects this Mound of Amran with that of the Kasr, was made at the same time with the circular one, whether as a part of the military defences alone, or as a dam to prevent inundations; as the river at that period passed, as I conceive (from the arrangement of another part of the mound), through the *deserted* bed so often mentioned; or it might have been to answer both purposes.

I shall close these observations on the site of Ancient Babylon with some further remarks on this deserted bed of the Euphrates, as the existence of it not only shows that the river has, in one instance at least, entirely changed its course through the ruins in that part, but that it has also had some considerable effect on the present distribution and state of these mounds.

Mr. Rich thus describes it (page 67):—"The embankment of the river is separated from the Mounds of Amran and the Kasr by a *winding valley* or *ravine* 150 yards in breadth, the bottom of which is white with nitre, and apparently never had any buildings in it, except a *small circular heap* in the centre of it."—This, as I have said before, has every character of a river-bed, and is, moreover, precisely of the same breadth with the Euphrates; that is, 150 yards, as it has already been stated from the authority of Mr. Rich (page 53).

This ancient bed is traceable through a course of

about a mile and a half; and it commences not very far below the point from whence the river may be supposed to have departed from the general course which it held through the site of the ancient city, and through the narrow pass, between the two mounds, taken for the remains of the palaces. In its progress, it has evidently sapped the great southern mound (or that of Amran); and the *circular heap* above mentioned, is no doubt a portion of that mound, which was perhaps a mass of masonry too well consolidated to be dissolved or removed.* And accordingly the mound, named by Mr. Rich (page 58) the embankment, has been cut off from that of Amran.† It is probable, too, that the river in its present course has taken away a considerable portion of the mound of the *embankment*, which is at present in a state of dilapidation from the encroachment of the stream on it. (See page 67.)

Few persons, conversant with the nature of rivers and their changes, will for a moment hesitate to receive the internal evidence, contained in the Plan and description, in proof of this valley or ravine being a deserted bed of the Euphrates; and proving the tendency of that river, in common with all others that pass through alluvial soils, to vary their courses, unless art be employed to prevent it.‡

* I have seen in the Ganges, far out in the strongest part of the stream, a building which had stood there for a great number of years, and may perhaps be still there.

† See also the Plan of Mr. Rich.

‡ In a series of Maps of the Rhine, by Mr. Wiebeking of Darm-

It appears not improbable, that had Mr. Rich been aware of this circumstance, he might have been prepared to believe that the river might also have varied in other places, and thence have been induced to examine the ground between the *great bend* of the river, opposite to the Mujelibè, and the opening between the two mounds before spoken of; and, had he been so fortunate as to have discovered the traces of its ancient course in that line, it might possibly have given occasion to other discoveries, and to have made him, in a great degree, master of the plan and extent of the area of the ancient city.

To prevent an interruption of the main subject, I forbore to speak of the *ruin* named the *Kasr*; and of the subterraneous passage under the ravine; spoken of both by Mr. Rich and M. de Beauchamp.

I cannot but suspect that the ruin now standing, named the *Kasr*, is by no means a Babylonish structure, but one of much later date; possibly coëval with the circular and other mounds of earth before spoken of. In the first place, it appears to be seated on a mound of ruins or rubbish of ancient Babylon, and does not seem to be at all identified with them. For it is said (page 65) to be “surprisingly fresh in

stadt, 1796, these changes are admirably illustrated. It appears that the Rhine has so much varied its course, within no great length of time, that *patches* of ground, now far removed from its banks, were known to have been islands in its bed.

appearance;” which is not the usual character of ruins more than 2000 years old. Nor does there appear in the description any thing characteristic of a building of Babylonish construction, although it is, no doubt, built with bricks extracted from such.

It would appear to owe its remaining in existence to this time to the extreme tenacity of the *lime cement* used in the construction. Not but that lime cement was in use with the Babylonians, although they used bitumen generally. I cannot, however, agree with Mr. Rich (page 100) that “lime cement “ was the one most generally employed.” Probably the fact is that the works cemented with bitumen have chiefly disappeared, whilst those cemented with lime-mortar remain. By the specimens which have been exhibited here of the Babylonish bricks that had been laid in bitumen, and with the latter substance adhering to them, we are fully aware of the small degree of tenacity which it possesses. But it is agreed, on all hands, that it is extremely difficult to separate in a whole state the bricks that have been laid in lime-mortar in Babylon. (See also Mr. Rich’s account, page 100). The bricks which were laid in bitumen are probably those which are now found in a *whole* state in the construction of Baghdad, Hillah, and other places.

With respect to the subterraneous passage under the *mound* on which the ruin of the *Kasr* stands, it is difficult to make a right judgment of its intention

and use, unless its level, in respect of the plain and river, were better known. Mr. Rich has stated (pages 63, 64) that this passage is at the bottom of a ravine which has been hollowed out in digging for bricks; and which ravine he judged to be from forty to fifty feet in depth. He omits the height of the mound above the plain; but states that of Amran to be fifty or sixty feet, and of the mound of the embankment forty. The mound of the Kasr cannot be supposed to contain a less depth of rubbish than that of Amran; whence it should be concluded that the passage can be but little below the level of the plain, being immediately *under the foundations*, which, I believe, are never laid low in alluvial soils, the ground growing more and more loose, as we descend. The passage may therefore be about the ordinary level of the river; and its use, possibly, to serve as an aqueduct from it for the supply of the palace at large; the water being drawn up through apertures in the nature of wells.* The influx, of course, might be regulated by a sluice, and accommodated to the periodical swellings of the river. One can hardly suppose that the tunnel, spoken of by Diodorus, originated so far within the river bank, for the part seen by Mr. Rich was from 200 to 300 yards within the border of the mound.

Mr. Rich found this passage about seven feet in height; but was told that further on it was high

* An ancient aqueduct of this kind occurs on the Arabian Desert.

enough for a horseman to pass upright. The breadth is *implied* by the length of the sand-stones which form the roof, and which are said to be *several* yards long (page 64)*. M. de Beauchamp says six or seven feet in length, by three in breadth.

It remains that I should say a word respecting the *Nimroud Birs*, or Tower of Nimrod, situated on the west side of the Euphrates †.

I confess it does not appear to me to have the character of an artificial work, nor the very curious masonry on its summit that of one of the stages of such a structure as the Tower of Belus is described to have been; but rather like a building, which crowned the summit of a conical hill; and the cone itself too solid to be formed of *sun-dried* bricks. ‡ Nor does the mound appear to be furrowed by the running off of rain-water, like the Mujelibè. But I may be prejudiced; and every one must judge for himself.

Certainly the description of the matter of its composition is wanting. The places of the sun-dried bricks, and of the traces of building exactly similar

* It has been already remarked that Mr. Rich had no opportunity of correcting the press.

† See the drawings of its four fronts at the end of Mr. Rich's book.^a

‡ A traveller through the Desert remarked a conical hill with a building on it, situated at about forty-three British miles to the south of Hillah. It is named Al Athy; and is probably one of the two mounts seen by Mr. Rich from the top of the Mujelibè at a great distance (page 79). The other is perhaps the hill of red gravel seen by the same traveller.

^a See Note, page 89.—ED.

to the brick pile, should have been particularised. A knowledge of the former is more particularly wanted to enable us to judge whether the body of the conical hill be artificial or otherwise.

But, notwithstanding, Mr. Rich has, by his drawing and description, put the public in possession of what is, in its nature and description, a new discovery; for even M. Niebuhr's account of it leaves us to suppose it to have been no more than a large ruined tower, rising out of a mass of rubbish.

But whatsoever may be the nature of the Nimroud Birs, whether natural or artificial, it is so far distant from the centre of the remains, taken for those of Ancient Babylon at large, that it may be regarded as out of the question in respect of its being the Tower of Belus, which is described to have occupied the centre, whilst the *Birs* is seven miles and a half from the Kasr, eight and a half from the Mujelibè; so that it could not even be included within the area of Babylon, according to the above facts and descriptions found in Mr. Rich's Memoir.*

* On the sketch I have placed the Birs according to M. Niebuhr's bearing from Hillah; which is west, $27\frac{1}{2}$ degrees southerly. Mr. Rich reckons it south-west; in which case it would be no less than $9\frac{1}{2}$ miles from the Mujelibè.

Mr. Rich has made an observation respecting an appendage to the Nimroud Birs, which is common also to two other structures in the same quarter. He says, p. 76, "at a trifling distance from the Birs, and parallel with its eastern face, is a mound not inferior to the Kasr in elevation, but much longer than it is broad." *Al Heimar*, which bears, on a smaller scale, some resemblance to the Birs; and *Akerkouf*, a ruin in the quarter of Bagdad, have similar dependent mounds (p. 79, 80, 81). None is mentioned at the Mujelibè.

Mr Rich has expressed a wish in his Memoir to learn the opinions of other persons respecting the objects of his future researches. Certain of the remarks in the foregoing pages may be conceived applicable to this purpose. If it be possible to trace certain portions of the exterior ditch and of the mounds of rubbish, which the remains of the walls cannot but have left in most places, this object appears to be of the most importance, as a knowledge of the exterior must infallibly lead to that of the central positions. Accordingly, taking the *Mujelibè* or the *Kasr* for a *supposed* centre (merely as a point to reckon from in the first instance), the traces of the rubbish of the walls, and of the hollows left by the ditches, may be sought in the direction of the four cardinal points, generally, within the limits assigned to the extent of the site ; that is, from about four to five miles from the centre ; for the statement of Herodotus, at 120 stadia for each side, appears excessive and improbable. Wheresoever the mound and ditch may be fallen upon, it should of course be pursued with a view of finding the angle or return of the adjoining side, and so forward.

But if the canal of Mohawill lies in the probable direction of the city wall (a circumstance that must be known to Mr. Rich), that is likely to afford the most certain clue to the whole. And if the heaps of ruins are dispersed through all the different quarters, as they are in the line described by Mr. Rich, between Mohawill and Hillah, these ought to mark

the extent of the area, generally, towards each quarter.

If the artificial canal by which the Euphrates was conducted through the site of Babylon was really straight, it may be expected to have left traces enough to detect its general line of direction. In the course of traversing the soil for the before-mentioned purposes, it might be well to note all the different hollows that have at any time contained the waters of the Euphrates, with a view not only to this purpose, but for the sake of general information. Such traces are most likely to be found at a distance from the great mounds that lie towards the centre. Probably they will be most conspicuous at the commencement of the inundation.

Since the general course of the river is in this quarter to the S.S.E. and S.E. by S., it may be presumed that it was conducted through Babylon in that general direction, and that the plan of the city was constructed parallel to it.

The ground in and about the great mounds south of the Mujelibè should be particularly examined, partly with a view to find the ancient bed of the river between them, and partly to ascertain the precise limits as well as the altitudes of the mounds and the level of the subterraneous passage.

The mound lying between the *Kasr* and the *Mujelibè* should also be examined. It has probably been dug into for bricks, and some information may be collected from a view of the excavations.

It has not yet been distinctly shown by any person of what quality the materials of the *substratum* of the Mujelibè are. Much may be collected from a knowledge of this circumstance, as it is possible that it may have been a natural eminence reduced to that form ; such a one being said to occur at Musseib, a place at the side of the Euphrates, higher up on the same side (of Mesopotamia).

As Mr. Rich projected other excursions to these ruins (see his Memoir, page 45), we may soon expect some further information, and that probably of an interesting kind. It is obvious, however, that very much time will be required for the purpose of examining the different objects generally, they being so numerous and so widely extended.

SECOND
MEMOIR ON BABYLON:

CONTAINING

AN INQUIRY

INTO THE CORRESPONDENCE BETWEEN THE ANCIENT
DESCRIPTIONS OF BABYLON AND THE REMAINS STILL
VISIBLE ON THE SITE.

SUGGESTED BY THE "REMARKS" OF MAJOR RENNELL PUBLISHED
IN THE ARCHÆOLOGIA.

BY

CLAUDIUS JAMES RICH, Esq.

ADVERTISEMENT.

MY first very imperfect Memoir made its appearance in an oriental literary Journal, published in Vienna, and called the *Mines de l'Orient*. So numerous were the typographical errors of that edition, that my Essay was in many places scarcely recognisable even by myself. My friends were of opinion that it ought to be republished in England; and an edition of it was printed from the *Mines de l'Orient*, which was received with indulgence by the Public, notwithstanding the many inaccuracies which I fear must have been retained. I have not seen a copy of the English Edition, and therefore in the following Memoir I beg to be understood as referring entirely to the original German one.

SECOND MEMOIR

ON

THE RUINS OF BABYLON.

ON my first visit to Babylon I was struck by the want of accuracy in the accounts of all travellers who had visited that celebrated spot. The ruins appeared to me to merit a very minute description and delineation; but such a work it was evident would occupy much more time, and require more extensive information, than I was then in possession of; and I deferred the accomplishment of it to a more favourable conjuncture. In the mean time I was anxious to give some notion of the real state of the ruins: I therefore drew up a short account, accompanied by an illustrative sketch, which I ventured to offer to the public, principally with a view to excite the attention of the learned, and induce them to transmit to me such remarks as might enable me to accomplish my design in a more perfect manner than I could hope to do by my own unassisted efforts. It was no part of my object at that stage of the inquiry to bring forward my own speculations, had I then been

qualified to do so; and I purposely abstained from any remarks which did not tend to throw light on my account of the ruins, and stimulate the attention without misleading the judgment of those who applied themselves to the subject. But, having hitherto sufficiently separated observation from opinion, I now venture to lay before the public the result of better information and more matured opinions. I have been more particularly induced to enter into a discussion on the correspondence between the accounts of the ancient historians and the ruins I visited, by a paper written by Major Rennell,* professedly “to vindicate the truth and consistency of ancient history, as well as his own account of Babylon in the Geography of Herodotus,” as he “conceives my former statements to be at variance with commonly received opinions.” Diffident as I am in opposing my ideas to such an authority, I feel myself called upon to state that I cannot coincide with Major Rennell, either in his interpretation of the ancient writers, or in his deductions from the actual appearance of the ruins. I shall therefore make his Remarks the basis of the present dissertation, as they appear to me to contain all that can be said in favour of the old theory, with many additional particulars; and also because this method will afford me an op-

* Remarks on the Topography of Ancient Babylon, suggested by the recent observations and discoveries of Claudius James Rich, Esq., communicated to the Society of Antiquaries by Major Rennell; —from the *Archæologia*, London, 1816, pp. 22.

portunity of supplying some of the deficiencies of my former Memoir, and possibly of throwing some new light on the subject.

The sum of Major Rennell's argument is as follows:—The Euphrates divided Babylon into two equal parts: one palace, with the Tower of Belus, stood on the east of it, and the other immediately opposite it, on the west—each occupying central situations in their respective divisions; or rather, the palaces and temple together formed the central point of the city, and were separated from each other by the river.—Now, in my account of the ruins it is said that there are no remains on the western bank; therefore the river must formerly have run through the ruins described by me on the eastern side, so as to have divided them into two equal portions. But there are certain mounds laid down in my plan, which render it evident that the river could not have run in that direction. These mounds must consequently be referred to a town of more recent construction, of whose existence Major Rennell himself acknowledges we have no other evidence.

I shall now state in general terms what I have to object to this theory. None of the ancients say on which side of the river the Tower of Belus stood. The circumstance of there having been two palaces in Babylon is extremely questionable. There are no traces whatever on the spot of any such change in the river as Major Rennell imagines. The sup-

position of the existence of a more recent town, merely for the purpose of getting rid of the difficulty, cannot be allowed in the absence of all historical and traditional evidence, when the appearance of the ruins themselves is decidedly against it. And, finally, the descriptions of the ancient historians may be reconciled with the present remains, without having recourse to any such conjectures.—When a person ventures to disagree with such a writer as Major Rennell, it behoves him to state his reasons very particularly. I shall therefore proceed to develop the opinions which I have just stated.

Before we enter on any topographical inquiry in which we have to reconcile observation with history,—if we consider how different are the talents required for narrative and description, how numerous are the sources of error, and how devoid the ancients were of that minute accuracy and patient research which are required in this critical age,—so far from taking their accounts of places and positions in the strictest and most literal sense of which they are susceptible, we might allow them a very considerable latitude, without calling their general veracity in question. Instead of making this allowance, however, writers have too frequently seemed to expect a precision from the old historians in their accounts of very remote places, which could only be reasonably looked for in the treatises of professed topographers; and to have tried the very scanty accounts we have of many ancient places by a

stricter standard than many modern descriptions would bear. We naturally wish to make the most of what we possess in the smallest quantity, and to seize with avidity on a single word which may help us through the obscurity of antiquity, or enable us to establish a favourite hypothesis. The testimony of the ancients who have been on the spot must of course be placed far above those who merely copy others, whose statements, however high their rank in literature may be, must be received with much caution; and when their descriptions in either case do not accord with what we now see, it is much safer to say that they were mistaken than to attempt forcing a resemblance. It would require a separate memoir to prosecute this subject to the extent which would be necessary to show the various causes of error, give examples of the mistakes and inaccuracies even of professed travellers, and prove how often we have rendered the ancients accountable for much more than they ever dreamt of themselves. I the more readily refrain from such an inquiry at present, as it is not necessary to my subject to carry it so far. I have thought it requisite to state my general opinion of the ancients as topographical authorities; but, in reconciling the present remains of Babylon to their accounts, I shall not have occasion to contend for the latitude which may commonly be allowed to them. I shall on the contrary show that I am willing to adhere much closer to the only one of them whose authority is of any

value in this case than Major Rennell seems to be aware of.

Those who have investigated the antiquities of Babylon have laid much stress on the authority of Diodorus, probably adverting more to the quantity than the quality of the information he supplies. He never was on the spot : he lived in an age when, as he himself tells us, its area was ploughed over : he has therefore recourse to Ctesias ; and it must be owned that the want of discrimination in the ancients, and the credulity of Diodorus himself, were never more strongly exemplified than in his choice of a writer who confounds the Euphrates with the Tigris, and tells us that Semiramis erected a monument to her husband, which from the dimensions he specifies must have been of superior elevation to Mount Vesuvius, and nearly equal to Mount Hecla. (A) If these are not “ fairy tales,” I certainly know not to what the term can be applied. When an author can in so many instances be clearly convicted of ignorance and exaggeration, we are certainly not justified in altering what is already before our eyes to suit it to his description. We have only the very questionable authority of Ctesias for the second palace and the wonderful tunnel under the river ; but even he does not say whether the Tower of Belus stood on the east or west side. Herodotus, who will ever appear to greater advantage the more he is examined and understood, is the only historian who visited Babylon in person ; and he is in every

respect the best authority for its state in his time. The circumference he assigns to it has been generally deemed exaggerated ; but, after all, we cannot prove it to be so. He says nothing to determine the situation of the Palace (for he speaks but of one) and Temple ; he has no mention of east or west, or of proximity to the river. It is true, it has been attempted to establish from him, that the Temple was exactly in the centre of one of the halves into which the city was divided by the river ; which, by the way, if clearly made out, would not agree with Major Rennell's position of it on the river's banks ; but the error appears to have arisen from translating μέσος, *centre*. Herodotus's words are, ἐν δὲ Φάρσεϊ ἑκατέρῳ τῆς πόλιος ἐτετείχιστο ἐν μέσῳ, ἐν τῷ ἦεν τὰ βασιλῆϊα, περιβόλῳ τε μεγάλῳ τε καὶ ἰσχυρῷ· ἐν δὲ τῷ ἐτέρῳ, Διὸς Βήλου ἱρὸν χαλκόπυλον, κ. τ. λ. (Herod. Wessel. p. 85), in which I do not see the necessity of adopting so mathematical a signification. (B) Strabo, as might be expected, contains much fewer particulars than Herodotus ; and the other Grecian and Roman historians still less : they are consequently of little use in a topographical inquiry. It appears, therefore, that none of the ancients say whether the Tower of Belus was on the east or the west of the Euphrates ; that its position in the centre of the city, or even of one of its divisions, is by no means clearly made out ; and that while the description of the best ancient author involves no difficulties, the only particulars which

embarrass us are supported by the sole testimony of the worst.

It appears to me that Major Rennell's error (if I may be allowed to use such an expression) proceeds from his having fixed upon the Mujelibè to represent the Tower of Belus (an opinion which the more I consider the appearance of that ruin the less I am inclined to agree with), and reducing every other part of Babylon to that centre. Having settled this point, adopting the system of Diodorus, he refers the remaining ruins to the old and new palaces ; but in order to justify this arrangement, he is obliged to resort to the supposition of a change in the course of the river. "The several particulars of the remains on the site required only the presence of the river in a particular line of course to complete the general description given by the ancients."* The supposed change would therefore certainly cut the Gordian knot, if we believe the ruins on the east to be the only remains of Babylon ; but there are no traces whatever on the ground in support of such an assumption. I carefully examined the whole of the ground between Hillah and the Mujelibè, with a view to ascertain the possibility of a change ; but I was totally unable to discover the smallest vestiges indicative of it. The same examination was made by others, during my stay there, and since that time, with the same result. I

* "Remarks," p. 111.

have long been accustomed to observe the changes in the courses of rivers, from having lived ten years on the banks of one subject to them in a most remarkable degree. The Euphrates is by no means so variable: the lowness of its banks affording a facility for its discharging the superabundance of its waters by the means of canals and inundations, renders it not liable to a complete alteration of its course. The strong embankment built by the Babylonian monarchs was intended to prevent the overflow, not to secure its running in one channel; and ever since the embankment was ruined the river has expended itself in periodical inundations. This is the case in many parts of its progress; for instance, at Felugiah, the inundation from whence covers the whole face of the country as far as the walls of Bagdad; and the river itself has, to the best of my information, constantly flowed at that place in the same channel, without any variation. At Hillah, notwithstanding the numerous canals drawn from it, when it rises it overflows many parts of the western desert; and on the east it insinuates itself into all the hollows and more level parts of the ruins, converting them into lakes and morasses. This will sufficiently account for many appearances in those ruins which might surprise those who had not adverted to the circumstance. The Khezail district at such times is in many parts completely inundated; and still further down, since a dyke which used to be kept up at a considerable

expense has been broken, the river flows over the country as far as Bussora. But in no part of the Euphrates have I ever been able to discover traces of its having altered its course. On the other hand, the Tigris, which is much more rapid than the Euphrates, has none of these regulating valves to draw off its superfluous water, which consequently breaks down its own banks. This is the case during its course through the upper and middle parts of the Pashalik, where it is confined between high banks, and cannot be expended in inundations, or drawn off by canals; but in the southern districts, where it runs through the lowest part of the Beni Lam country, the banks are level, there are many drains, and it overflows readily. In those places it is not subject to the variations of channel which characterise it during the earlier part of its course.

Having shown that the first part of Major Rennell's theory is contradicted by a survey of the ground, I have to state the reasons which induce me equally to disagree with him in his second conjecture. This part of the subject requires to be treated at some length.

As some of the ruins now seen would obstruct the course of the Euphrates, supposed by Major Rennell, he removes this difficulty by referring them to another town. "The whole of the remains visible in the form of mounds, &c. do not belong exclusively to the ancient city, but in part to a subsequent

establishment, not recorded in history, and perhaps of a date previous to the Mahometan Conquest." (p. 110.) To this assumption I object.

1. The mounds or ruins rejected by Major Rennell differ in no respect from those he admits; they appear to form a part of the plan which they help to explain; they are connected with, or dependent on, the primitive mounds; and no sort of evidence can be drawn from their appearance or composition to call in question their being of equal antiquity.

2. It is granted by all, that the mounds of the Kasr and Amran, with some others among them, are a part of ancient Babylon. It appears very improbable that any one should attempt to build on such masses of decayed edifices, even in their present state, when they have doubtless diminished, and subsided into much greater solidity than at the period Major R. assigns to his city. If ever a town existed in this neighbourhood, it certainly would not have been among or upon these heaps of rubbish. The only mound which could have undergone a revolution of this nature is the Mujelibè, which, whatever it may have been, certainly now bears a striking resemblance to fortified artificial mounts, like the castles of Kerkook, Arbil, and many other places in these countries;—it might even now be restored to its castellated state. I am clearly of opinion, as I think every one must be who has visited the spot, that either the whole of the eastern

ruins are Babylon, or they must be referred entirely to another establishment, and Babylon left out of the question. The Mujelibè, as before observed, might possibly be excepted from this decision, were it necessary, as it appears to be, like the ruin at Nineveh,* rather an artificial mount than a mass of decayed building.

3. One reason assigned by Major Rennell for supposing a more recent town is, “that it is difficult to reconcile the circular and other mounds of earth with the description of the regular distribution of streets in ancient Babylon” (p. 110); though, in the *Geography of Herodotus*, he is willing to allow that there existed in each quarter of Babylon a circular space surrounded by a wall.† I admit for a moment this regular distribution of streets. But Major Rennell receives the eastern ruins as the Tower and Palaces. Now it is clear that the regular distribution of streets could never have been observed in or near these buildings; and so far from excluding the boundary wall on account of its not falling in with it, had any symptoms of such an arrangement been observed here, it would have been reason sufficient to pronounce at once that the eastern ruins could neither represent the Palaces nor the Tower.—After all, I find a difficulty in believing that the whole area of Babylon was divided into regular compartments by the intersection

* See Note A.

† *Geography of Herod.* p. 337.

of lines of houses at right angles, like the surface of a chess-board. This savours strongly of an imaginary arrangement. It might have been nearly true of some divisions or quarters, yet I would nowhere vouch for its mathematical accuracy. The area of Babylon, we have every reason to believe, was at all times very far from being thickly built on ; a very considerable proportion of it was occupied by cultivation ; and the care with which the river was fortified with an embattled wall and brazen gates, guarding each bank through the whole extent of the town, seems indicative of the scantiness of the houses, even on the river ; which seems further illustrated by the ease with which Cyrus turned the river, unknown to the inhabitants, entered by its dry channel, and lodged his army safely in the town, within the fortifications by which it was guarded on the water side, before the Babylonians suspected what he was about.

Major Rennell in another part of the "Remarks" (p. 127) says, he cannot persuade himself that the parts of a building named the Kasr is a Babylonian structure. He believes it to be "one of a much later date, possibly coeval with the circular and other mounds of earth before mentioned ;" *i. e.* subsequent to old Babylon, but before the time of Islam. His principal objection is, that it looks too fresh, "which," he observes, "is not the character of ruins more than 2000 years old." Neither is it the character of buildings of the age which he

assigns to his supposed town, *i. e.* prior to the introduction of Islam; and if it be allowed to have preserved its freshness so long, there can certainly be no difficulty in granting it the additional number of years. In this pure and dry climate, other evidence than its being fresh and unworn is required to dispute the antiquity of a ruin which has till very lately remained entirely covered up. Whatever may be its appearance, the difficulties which oppose its rejection from the ruins of Babylon are very great, independent of the improbability of such a building having been erected on a heap of rubbish. But it does not stand *on* the mound which I have named after it, and which is allowed to be Babylonian; it is enclosed within the mass, and has been covered by it. The rubbish has only been cleared off its top part; and its side walls, though not perfectly laid open, yet are seen to reach down very far below the general surface of the mound, as my drawing shows. This building is indisputably connected with walls and fragments similar to it, to be seen in various parts of the same mound, quite in its heart, and at a great depth, and which have been discovered in piercing and hollowing out the heaps to find bricks:—some of these walls are, I believe, on a level with the plain itself. I cannot therefore doubt that the walls are coeval with the mound itself by which they have been covered; or at least erected before the buildings whose ruins formed the mound had crumbled into rubbish (for it is not

pretended to refer every ruin which remains of ancient Babylon to the age of Nebuchadnezzar); and if *they* are condemned, the mound itself, consequently, and all the mounds or heaps attached to it, cannot be admitted to be a part of ancient Babylon.—I shall in the sequel have occasion to return to this subject.

As Major Rennell appears generally inclined to receive so literally the statements of the ancients, even of Diodorus, it is a little surprising that he has not adverted to the dimensions assigned by that writer to the palaces: he would have seen, that so far from warranting the belief of the eastern ruins comprising the remains of all the public edifices of Babylon (viz., the new palace of 60 stades in circumference, the old one of 30 stades, and the Temple of Belus of 8 stades), it is evident that they will only answer to the new palace, with its Acropolis. It is true, Diodorus places his largest palace on the west; but an author who confounds the Tigris with the Euphrates may without injustice be suspected of a topographical inaccuracy of this nature. (C) Indeed, whether we do or do not admit the authority of Diodorus, the best conclusion to be drawn from the appearance and plan of these ruins is, that they represent the whole of the royal precincts, including the hanging gardens.* The ruins of the palace of

* We should form a very incorrect notion of the residence of an eastern monarch, if we imagined it was one building which in its decay would leave a single mound, or mass of ruins. Such esta-

Babylon might well resemble in every respect those we see on the eastern bank of the Euphrates: the mound, called by Major Rennell "the rampart of New Babylon," will answer perfectly to the outer wall of the palace, for which its extent is by no means too great; and thus all difficulties immediately vanish, without the necessity of turning the river or building a new town. This could hardly have failed striking Major Rennell also, had he not set out by assuming the Mujelibè to be the Tower of Belus; which, if the supposition of the palace having been situated here be just, must certainly be looked for in a different direction — each being said to be seated within its own division of the city. In fact, there is not the slightest reason to believe that the Tower was situated on or near the river, though we may safely infer that such a stream must have been taken advantage of in placing the palace. Had the Palace and Tower been so very near each other, it would probably have been remarked by Herodotus, whose authority Major Rennell is willing to abandon in this particular. From what I have before said, it may be seen that I cannot receive the Mujelibè as the Tower of Belus, even independent of its position.

Having said so much of the general state of the eastern ruins, I have but a few words to add con-

ishments always consist of a fortified inclosure, the area of which is occupied by many buildings of various kinds, without symmetry or general design, and with large vacant spaces between them.

cerning the particular parts of them, about which Major Rennell seems to think I have not been sufficiently explicit in my former Memoir. I was fearful of becoming tedious by expatiating on misshapen heaps of rubbish, which are much better understood by a drawing, except—like the mound of the Kasr—they happen to contain within their general mass some peculiarity worthy of remark. It is on this account, and not because I had not examined them, that I passed the little heaps which lie between the Kasr and the Mujelibè without particular mention, after having satisfied myself that they contained nothing which required one. They are in fact nothing more than low heaps, or traces of building extending in that direction, of no elevation or determined form, precisely as I have laid them down in my Plan. Major Rennell seems, however, to consider them as requisite to the formation of his theory. He calls them the “north-east mounds,” in the sketch of the site of Ancient Babylon (drawn chiefly from the information contained in my Memoir) which he has prefixed to his “Remarks;” has assigned them a place, form, and magnitude to which they are by no means entitled,* and conjectures them to be the ruins of the least and oldest of the palaces mentioned by Diodorus.

I observe some other alterations from my plan, which are not wholly immaterial: especially an

* Vide the Sketch prefixed to his “Remarks,” &c. (D.)

opening between the south-west angle of the mound called the Kasr, and the arm which ought to connect it with the north-west angle of that of Amran. I suppose I have to attribute these to the person who engraved the plan for the English edition of my Memoir, as Major Rennell would doubtless have noticed the alterations, had they come from himself. But there is another error, which I have to attribute to my own want of precision. The mounds placed to the right and left of the Mohawill road by Major Rennell should be by no means so frequent, or of such magnitude : he was probably deceived by the looseness of my expression, that “the whole country between Mohawill and Hillah exhibits at *intervals* traces of building.” But there should have been none at all south of Jumjuma, or between the ruins laid down in my plan and the town of Hillah.

Of the mound of Amran I was not aware that it was possible to say anything more, after having described its form and general appearance, as it offers no peculiarity meriting attention. It is composed, like the rest, of earth, or rubbish formed by the decomposition of bricks and other materials. The canal of Mohawill, Major Rennell seems inclined to think, may have been the ditch of Babylon. I confess this is a probability which did not strike me when I was on the spot ; and I saw no reason to doubt its ever having been different from what it is at present,—a canal cut from the Euphrates to water some government lands which are let out for an

annual rent. It is crossed by a bridge of one small arch, and differs in no respect from the multitude of other canals which traverse this country.

In the foregoing remarks I have taken for granted, what indeed appears to be now the general belief, that the ruins at Hillah are those of Babylon. I have myself no doubt of the fact; but as Major Rennell has hinted a possibility of there having been another town here, I think it but fair to state all that can be urged in favour of such a supposition. The canals which run along the southern side of the Mujelibè are called New and Old Neel, the latter of which it is said to be very ancient. This fact becomes interesting when we find Al Neel mentioned in history as the name of a place or district; but the notices we have of this place are very few and meagre. “Abulfeda,”* says Al Neel, “is *a place* between Bagdad and Coufah.” In Assemani I find a bishop of Al Neel, Nilus, in Babylonia mentioned in A.D. 1028. He was one of the suffragans in the patriarch’s own province. Amrus, in the “Life of St. Elias,”† says there was but one bishop for Naamania, Al Neel, and Badraya, a village near Koche; from which there is some reason to infer that those places were near each other.† The Turkish geographer mentions Al Neel in his list of the districts of Bagdad; and in the particular description says no more than “Nil is a district containing several villages, with

* Takweem ul Boldan.

† Assemani, vol. iii. p. 766.

much cultivation and many gardens ;”* but he does not say where it is situated. D’Herbelot mentions a Christian Arabian poet, surnamed Al Neelè, A.H. 608. D’Anville marks on his map of the Euphrates and Tigris a place named Nil, or Nilus, on the west bank of the Euphrates, below Hillah, at the mouth of the canal of Coufah.† I am ignorant of the authority on which he has introduced this place into his Memoir and map ; but as he places Kasr Ibn Hobeira on the same canal, it is to be inferred that he is mistaken as to its position. Seif ud Doulah is said to have succeeded, in A.H. 479, to his father’s possessions, the districts of Hillah, Al Neel, &c.‡

I am not able to trace Al Neel further back in history than 1000 of Christ.

These, it must be confessed, will at first sight appear but very scanty materials to form any decisive judgment on so important a point. When we consider them attentively, however, several particulars may be inferred from them, of considerable use in the present question. The obscurity in which it is involved is in itself a presumptive proof of its little importance. The name is evidently derived from the canal. This latter circumstance might lead us to infer that there was no town at all of this name, but that it was merely a canal and district containing several villages, as indeed is expressly stated by

* Jehan Numa, p. 462.

† D’Anville, *L’Euphrate et le Tigre*, p. 126.

‡ *Modern Universal History*, vol. iv. p. 372.

the Turkish geographer. Such are the modern districts of this country, which take their names from the canal which waters it; but none contain any town which would leave the slightest traces a few years after its destruction. As instances, I may mention Dujjeil and Khalis, neither of which districts contains any place with these names. The expression of Abulfeda is one of those equivocal words which occur too often in the Oriental languages. *بلدة* may mean either a district or town; and a person now commonly says he is going to Khalis, or he has lived at Dujjeil; by which he may mean any of the villages contained within that district; and its having been a bishopric, is in the East no proof of its size—either a whole district or a very insignificant village may have enjoyed this honour; and we see that at one period the bishopric of Al Neel was united with two others. I have myself no doubt that Al Neel was always, as it is now, the name of a district, and that it contained no remarkable place; in which belief I am further justified by the information obligingly communicated to me by H. H., the Pasha, from the register-office of Bagdad. But as some people may possibly differ with me, I shall consider it also under a different point of view, and endeavour to anticipate every objection.

I think it will readily be conceded that Al Neel—supposing it to have been a town named after the canal—could not have been a place of any magnitude; or, to speak more precisely, there is not the

slightest reason to believe it could have been as large as Hillah. We have no records which give it any high antiquity; nor is there any necessity for placing it at the mouth of the canal. We have indeed examples of the contrary in Nahrouan, Naher Malcha, and many other places. We thus come at some important conclusions. Whatever ruins the town of Neel—if ever such a place existed—may be believed to have left, we have no positive reason for supposing them to occupy the spot: and a place even much larger and more important than Hillah could not leave remains in any degree resembling, either in magnitude or composition, those we now see on the eastern bank of the Euphrates. Were it necessary, innumerable instances might be adduced from the ruins of well-known places in this neighbourhood in support of this assertion: and to show that the eastern ruins must be wholly the remains of public buildings, the large cities of Ctesiphon and Seleucia will suffice;—neither of them has left vestiges of more than their walls (if we except the *Tauk Kesra*), and indeed those of Seleucia have almost totally disappeared.

I will go further, and state my opinion that, even should it be imagined by any one that there was a town on the north side of the canal and at the base of the *Mujelibè* (the only spot where it could have been situated), and that it was considerable enough to have had a castle the size of that curious ruin,—this supposition makes no difference whatever in

the opinion I have expressed. I will take for an example the modern town of Arbil, which has an artificial mount at least as large as the Mujelibè, and much higher. This mount, which is of the highest antiquity, and probably existed in the days of Alexander, has been crowned by a succession of castles in different ages. The present is a Turkish building, and contains within its walls (as the others doubtless did) a portion of the town, consisting of two mahallas or parishes: the remainder of the town is situated at the foot of the mount, and would, if abandoned, in a few years leave not a single vestige behind. Precisely the same observation holds good of the still more considerable city and castle of Kerkook. We may therefore, I presume, safely decide, that in no case is there the slightest reason to confound the ruins of Al Neel, whatever that place may have been, with the remains on the eastern side of the Euphrates, and which I have ventured to call the Palace of Babylon.

I am aware that some people may at first possibly conceive a hasty idea that Al Neel is the town whose existence was supposed by Major Rennell, in order to remove the obstacles to his theory of the change in the course of the river. In the former part of this Memoir I have shown the impossibility of buildings being placed in mounds which are themselves decayed buildings. It is, besides, out of the question to suppose that a town of a size sufficient to require an inclosure like that which I

believe to have been the wall of the palace, and Major Rennell, "the rampart of new Babylon," should have been inserted, as it were, in the different hollows and vacant spaces of the ruins, with no reason in the world to choose so awkward and inconvenient a situation; and any villages which may have been placed within the inclosure (like the one we now find there) are obviously of no account. The only situation, as I have already remarked, where a town could have been placed, is either at Hillah or to the north of the Neel.

Before the foundation, or rather augmentation, of Hillah by Seif ud Doulah, A.H. 495, there was a place there, named Al Jamaein, or The two Mosques.* The name Hillah, which was given it after its having been enlarged and fortified, is derived from an Arabic root, signifying to rest, or take up one's abode.

I therefore repeat my belief, formed from the inspection of the ruins about Hillah, that they are of one character, and must be received altogether as a part of Babylon, or wholly rejected without reserve. And I must here state what seems to me to be the best evidence for their antiquity, independent of their appearance, dimensions, and correspondence with the descriptions of the ancients.—The burnt bricks of which the ruins are principally composed, and which have inscriptions on them in

* Abulfeda.

the cuneiform character, only found in Babylon and Persepolis, are all invariably placed in a similar manner, viz., with their faces or written sides downwards. This argues some design in placing them, though what that might have been it is now impossible to say. It, however, proves sufficiently that the buildings must have been erected when the bricks were made, and the very ancient and peculiar form of characters on them in use. When these bricks are found in more modern constructions, as in Bagdad and Hillah, they are of course placed indifferently, without regard to the writing on them. In the greatest depth in the excavations at the Kasr, at the subterraneous passage or canal, I have myself found small pieces of baked clay covered with cuneiform writing, and sometimes with figures indisputably Babylonian: these shall be described when I come to speak of the Babylonian antiques. Had the ruins been more recent than is here presumed, these inscriptions would not have been found in this order and manner, and we should in all probability have found others in the character or language then in use. Thus, had the town been Mahometan or Christian, we might reasonably expect to meet with fragments of Coufic or Stranghelo. There is another equally remarkable circumstance in these ruins, and which is almost conclusive with respect to their antiquity. In the very heart of the mound called the Kasr, and also in the ruins on the bank of the river, which have been crumbled and shivered by the ac-

tion of the water, I saw earthen urns filled with ashes, with some small fragments of bones in them ; and in the northern face of the Mujelibè I discovered a gallery filled with skeletons inclosed in wooden coffins. Of the high antiquity of the sepulchral urns no one will for an instant doubt ; and that of the skeletons is sufficiently ascertained, both from the mode of burial, which has never been practised in this country since the introduction of Islam, and still more by a curious brass ornament which I found in one of the coffins. These discoveries are of the most interesting nature ; and though it is certainly difficult to reconcile them with any theory of these ruins, yet in themselves they sufficiently establish their antiquity. The two separate modes of burial, too, are highly worthy of attention. There is, I believe, no reason to suppose that the Babylonians burned their dead ; the old Persians we know never did. It is not impossible that the difference may indicate the several usages of the Babylonians and Greeks, and that the urns may contain the ashes of the soldiers of Alexander and of his successors.

I have now done with the eastern ruins.—Major Rennell considers me as the first who established the fact of there being no ruins on the western banks of the river ; but Beauchamp states the same fact in the clearest and most positive manner. His words are, “ *Je me suis soigneusement informé des Arabes dont la profession est d'enlever les briques de ces ruines pour construire les edifices de Hella, si en*

creusant la terre de l'autre coté du fleuve c'est à dire, de la rive occidentale du fleuve, on y trouvait des bricques—ils m'ont repondu non*.” And he goes so far as to express an opinion that Babylon never occupied both sides of the river—“ Je ne suis pas tout-à-fait du sentiment de M. d'Anville, qui partage Babylone de deux cotés du fleuve.” (*Mem. de l'Académie des Inscriptions*, v. xlviii.—Notes to M. de S^{te} Croix's Dissertation on Babylon.) (E)

It now remains for me to notice the most interesting and remarkable of all the Babylonian remains, viz., the Birš Nemroud.—If any building may be supposed to have left considerable traces, it is certainly the Pyramid or Tower of Belus; which by its form, dimensions, and the solidity of its construction, was well calculated to resist the ravages of time; and, if human force had not been employed, would in all probability have remained to the present day, in nearly as perfect a state as the pyramids of Egypt. Even under the dilapidation which we know it to have undergone at a very early period, we might reasonably look for traces of it after every other vestige of Babylon had vanished from the face of the earth. When, therefore, we see within a short distance from the spot fixed on, both by geographers and antiquarians, and the tradition of the country, to be the site of ancient Babylon, a stupendous pile,

* It is true, indeed, that Beauchamp speaks only from information which he received from others, and which applies rather to subterranean remains than to ruins on the surface of the earth.

which appears to have been built in receding stages, which bears the most indisputable traces both of the violence of man and the lapse of ages, and yet continues to tower over the desert, the wonder of successive generations,—it is impossible that their perfect correspondence with all the accounts of the Tower of Belus should not strike the most careless observer, and induce him to attempt clearing away the difficulties which have been suggested by Major Rennell against its reception within the limits of Babylon. I am of opinion that this ruin is of a nature to fix of itself the locality of Babylon, even to the exclusion of those on the eastern side of the river; and if the ancients had actually assigned a position to the Tower irreconcilable with the Birs, it would be more reasonable to suppose that some error had crept into their accounts, than to reject this most remarkable of all the ruins. But there is no necessity for either supposition. From the view of the ancient historians I have taken in the foregoing part of this Memoir, it will appear that none of them has positively fixed the spot where the Tower of Belus stood; and if we receive the dimensions of Babylon assigned by the best of the ancient historians—himself an eye-witness—both the Birs and the eastern ruins will fairly come within its limits. Against receiving his testimony we have only our own notions of probability. We have reduced the dimensions merely because they do not accord with our ideas of the size of a city; but we know Babylon to have

been rather an inclosed district than a city; and there can of course be no hesitation in abandoning less accurate evidence, and receiving the statement of Herodotus, if there be any traces on the spot to justify it.

The whole height of the Birs Nemroud above the plain to the summit of the brick wall is two hundred and thirty-five feet (235). The brick wall itself which stands on the edge of the summit, and was undoubtedly the face of another stage, is thirty-seven (37) feet high. In the side of the pile a little below the summit is very clearly to be seen part of another brick wall, precisely resembling the fragment which crowns the summit, but which still encases and supports its part of the mound. This is clearly indicative of another stage of greater extent. The masonry is infinitely superior to any thing of the kind I have ever seen; and leaving out of the question any conjecture relative to the original destination of this ruin, the impression made by a sight of it is, that it was a solid pile, composed in the interior of unburnt brick, and perhaps earth or rubbish; that it was constructed in receding stages, and faced with fine burnt bricks, having inscriptions on them, laid in a very thin layer of lime cement; and that it was reduced by violence to its present ruinous condition. The upper stories have been forcibly broken down, and fire has been employed as an instrument of destruction, though it is not easy to say precisely how or why. The facing of fine

bricks has partly been removed, and partly covered by the falling down of the mass which it supported and kept together. I speak with the greater confidence of the different stages of this pile, from my own observations having been recently confirmed and extended by an intelligent traveller*, who is of opinion that the traces of *four* stages are clearly discernible. As I believe it is his intention to lay the account of his travels before the world, I am unwilling to forestall any of his observations ; but I must not omit to notice a remarkable result arising out of them. The Tower of Belus was a stadium in height ; therefore, if we suppose the eight towers or stages which composed the Pyramid of Belus to have been of equal height, according to Major Rennell's idea, which is preferable to that of the Count de Caylus (see *Mem. de l'Académie*, vol. xxxi.), we ought to find traces of four of them in the fragment which remains, whose elevation is 235 feet ; and this is precisely the number which Mr. Buckingham believes he has discovered. This result is the more worthy attention, as it did not occur to Mr. B. himself.

The Birs Nemroud is apparently the Tower of Belus of Benjamin of Tudela, who says it was destroyed by fire from heaven—a curious remark, as it proves he must have observed the vitrified masses on the summit. M. Beauchamp speaks of it under

* Mr. Buckingham.

the appellation of Brouss (F): he never visited it himself; indeed the undertaking is not always practicable without a strong escort. The excellent Niebuhr, whose intelligence, industry, and accuracy cannot be too often praised, suspects the Birs to have been the Tower of Belus. He gives a very good account of it even from the hasty view which circumstances would allow of his taking: "Au sud-ouest de Hellè à $1\frac{1}{4}$ mille, et par conséquent à l'ouest de l'Euphrate, on trouve encore d'autres restes de l'ancienne Babylone: ici il y a toute une colline de ces belles pierres de murailles dont j'ai parlé; et au dessus il y a une tour qui à ce qui paraît est intérieurement aussi toute remplie de ces pierres de murailles cuites; mais les pierres de dehors (qui sait combien de pieds d'épaisseur) sont perdues par le tems dans cette épaisse muraille, ou plutôt dans ces grands tas de pierres: il y a ici et là de petits trous qui percent d'un côté jusqu'à l'autre; sans doute pour y donner un libre passage à l'air, et pour empêcher au dedans l'humidité, qui auroit pu nuire au bâtiment." (*Voyage*, vol. ii. p. 236.) In this description the Birs may be recognised, even through the obscurity of a job translation.

After this, I was certainly surprised to find that Major Rennell not only excludes it from the limits of Babylon, but even doubts the mound being artificial. So indisputably evident is the fact of the whole mass being from top to bottom artificial, that I should as soon have thought of writing a dissertation to prove that the Pyramids are the work of human hands, as

of dwelling on this point. Indeed, were there any thing equivocal in the appearance of the mound itself, the principles of physical geography utterly forbid the supposition of there being an isolated hill of natural formation in ground formed by the depositions of a river; and therefore, if any traveller fancied he saw a natural hill at Musseib, or any other place in that direction, he was most unquestionably mistaken.

The same reasons prove that there could never have been bitumen springs in Babylon. (See *Geog. of Herod.* p. 369.) Diodorus, indeed, does not say, as Major Rennell supposes, that bitumen was found in Babylon, but in Babylonia,—which is a very different thing.

The Birs Nemroud is in all likelihood at present pretty nearly in the state in which Alexander saw it; if we give any credit to the report that ten thousand men could only remove the rubbish, preparatory to repairing it, in two months. If, indeed, it required one half of that number to disencumber it, the state of dilapidation must have been complete. The immense masses of vitrified brick which are seen on the top of the mount appear to have marked its summit since the time of its destruction. The rubbish about its base was probably in much greater quantities, the weather having dissipated much of it in the course of so many revolving ages; and, possibly, portions of the exterior facing of fine brick may have disappeared at different periods.

In the foregoing observations I have endeavoured to

show that the ruins of Babylon in their present state may be perfectly reconciled with the best descriptions of the Grecian writers, without doing violence to either. I feel persuaded that the more the subject is investigated, the stronger will the conformity be found; but it is one in which the spirit of system would be peculiarly misplaced: and I am so far from being bigoted to my own opinions, that should I, in the course of my researches, happen to discover particulars which may reasonably appear to militate against them, I will be the first to lay them before the public.

Bagdad, July, 1817.

P.S. Since writing the above, I have received an extract from the Supplement to the fifth edition of the *Encyclopædia Britannica*, containing a summary of my former accounts of Babylon, with the author's own ideas on the subject. It is peculiarly gratifying to me to find that my opinions have the confirmation of such a writer.

NOTES.

(A.) Page 144.

If, rejecting the measurements of Ctesias, it be admitted that there was at Nineveh a monument of this very ancient and durable form, I think the remains of it are still to be seen among traces which yet exist of that city. Opposite the town of Mousul is an inclosure of a rectangular form, corresponding with the cardinal points of the compass; the eastern and western sides being the longest, the latter facing the river. The area, which is now cultivated and offers no vestiges of building, is too small to have contained a town larger than Mousul; but it may be supposed to answer to the palace of Nineveh. The boundary, which may be perfectly traced all round, now looks like an embankment of earth or rubbish, of small elevation; and has attached to it, and in its line, at several places, mounds of greater size and solidity. The first of these forms the south-west angle; and on it is built the village of Nebbi Yunus (described and delineated by Niebuhr as Nurica), where they show the tomb of the prophet Jonas, much revered by the Mahometans.

The next, and largest of all, is the one which may be supposed to be the monument of Ninus. It is situated near the centre of the western face of the inclosure, and is joined like the others by the boundary wall;—the natives call it Koyunjuk Tepè. Its form is that of a truncated pyramid, with regular steep sides and a flat top: it is composed, as I ascertained, from some excavations of stones and earth, the latter predominating sufficiently to admit of the summit

being cultivated by the inhabitants of the village of Koyun-juk, which is built on it at the north-east extremity. The only means I had at the time I visited it of ascertaining its dimensions was by a cord which I procured from Mousul. This gave 178 feet for the greatest height, 1850 feet the length of the summit east and west, and 1147 feet for its breadth north and south. In the measurement of the length I have less confidence than in the others, as I fear the straight line was not very correctly preserved ; and the east side is in a less perfect condition than the others. The other mounds on the boundary wall offer nothing worthy of remark in this place. Out of one in the north face of the boundary was dug, a short time ago, an immense block of stone, on which were sculptured the figures of men and animals. So remarkable was this fragment of antiquity, that even Turkish apathy was roused, and the Pasha and most of the principal people of Mousul came out to see it. One of the spectators particularly recollected, among the sculptures of this stone, the figure of a man on horseback with a long lance in his hand, followed by a great many others on foot. The stone was soon afterwards cut into small pieces for repairing the buildings of Mousul, and this inestimable specimen of the arts and manners of the earliest ages irrecoverably lost. Cylinders like those of Babylon, and some other antiques, are occasionally found here ; but I have never seen or heard of inscriptions. From the assurances given me by the Pasha of Mousul, I entertain great hopes that any monument which may be hereafter discovered will be rescued from destruction. A ruined city, as Major Rennell justly observes, is a quarry above ground. It is very likely that a considerable part of Mousul, at least of the public works, was constructed with the materials found at Nineveh. Koyunjuk Tepè has been dug into in some places in search of them ; and to this day

stones of very large dimensions, which sufficiently attest their high antiquity, are found in or at the foot of the mound which forms the boundary. These the Turks break into small fragments, to employ in the construction of their edifices. The permanent part of the bridge of Mousul was built by a late Pasha wholly with stones found in the part of the boundary which connects the Koyunjuk with Nebbi Yunus, and which is the least considerable of all. The small river Khausar traverses the area above described from east to west, and divides it nearly into two equal parts: it makes a sweep round the east and south sides of Koyunjuk Tepè, and then discharges itself into the Tigris above the bridge of Mousul. It is almost superfluous to add that the mount of Koyunjuk Tepè is wholly artificial.

I hope to make Nineveh the subject of a future Memoir*. It is possible that the Larissa of Xenophon, with its pyramid, whose base was one plethron, and height two, was no other than Nineveh with the sepulchre of Ninus (see *Anabasis*, lib. iii).—I cannot quit this subject without remarking a curious coincidence. At Messila, a Median town six parasangs above Larissa, Xenophon saw the base of a wall built of *hewn shelly stone*, *Ην δὲ ἡ κρηπὶς λίθου ξέστοῦ κογχυλιάτου, κ. τ. λ.* At Mousul I have seen pieces of this stone, which is a complete conglomeration of small shells.

(B.) Page 145.

When I remarked in my former Memoir that the words of Herodotus, stating the basement story of the Tower of Belus to be *σταδίου καὶ τὸ μῆκος καὶ τὸ εὖρος*, should be translated “of a stadium in length and breadth,” and not “height and breadth,” I had not seen Wesseling’s edition of Herodotus; by which I find that the reading which makes

* See Rich’s Koordistan, vol. ii. p. 30—65.—ED.

Herodotus guilty of an absurdity that would reduce him to a level with Ctesias, originated in an error which had long ago been exploded. (Vide Herod. Wess. p. 85, note.)

(C.) Page 153.

Some observations occur here respecting the palace or palaces, which ought not to be omitted. In the Geography of Herodotus, p. 355, it is said (from Diodorus) that the lesser palace is on the east, where is also the brazen statue of Belus. Lest it should be conceived that this statement contains some allusion to the Temple of Belus, and consequently be used to establish the position of that building, it is proper to give the whole passage from Diodorus: "In place of the fictile earthen images of beasts (which ornament the walls of the large palace) are here (in the smaller palace) the brazen statues of Ninus and Semiramis, of the prefects, and also of Jupiter, who is named by the Babylonians, Belus." (Diod. lib. ii. c. 8.)

In the same work (p. 337) Major Rennell, in giving an account of Babylon according to the notions of Herodotus, says, "In the centre of each division of the city is a *circular* space, surrounded by a wall; in one of these stands the royal palace, which fills a large and strongly defended space; the Temple of Jupiter occupies the other." And yet in the "Remarks" he objects to the inclosure which I suppose may have contained the palace, on account of its being circular. Neither is the description he has given from Herodotus, as quoted above, reconcileable with what he says a little further on, on the authority of Diodorus,—that the palace was a *square* of $1\frac{1}{2}$ mile.—(See Geog. of Herod., p. 354.) But the truth is, that neither does Herodotus mention the circle, nor Diodorus the square. There is certainly no reason to believe that the palace was of the latter form.

(D.) Page 155.

I must here remark that *Tauk Kesra*, the palace of the Sassanian kings, is not built of Babylonian bricks, as has been supposed ; and that the masonry is strikingly inferior to that of Babylon.

(E.) Page 165.

The same note to the curious and learned *Memoir* of M. de Sainte Croix contains a discussion concerning the latitude and longitude of *Hillah*, and its distance from *Bagdad*, by M. *Beauchamp*. *Niebuhr* gives the latitude of *Hillah* $32^{\circ}28'$, which would make its distance from *Bagdad* amount to $21\frac{2}{3}$ leagues of 25 to a degree. M. *Beauchamp*, from an observation of the transit of *Mercury* over the sun, on the 5th November, 1789, makes it 5 degrees to the west of *Bagdad*, which he calls being very nearly under the same meridian—"sous le même méridien à très peu près." He is of opinion that the distance given by *Niebuhr's* observation (22 leagues) is a little too much, because only 18 leagues are reckoned in performing the journey, the whole of the way being over a desert as flat as a table. He says that in two journeys he made from *Badgad* to *Hillah* he counted $16\frac{1}{2}$ hours ordinary pace of a caravan. *Niebuhr* supposes 13 to 14 German miles, $13\frac{1}{2}$ of which would be just $22\frac{1}{2}$ leagues of 25 to the degree. From this distance, which appears overrated, M. *Beauchamp* concludes that *Niebuhr's* latitude is too small: his own observation gave $32^{\circ}40'$; but he deducts $5'$ for the error of his instrument, which error he did not ascertain, but only supposed—he does not say why. This, he says, will be found to correspond better with the reckoned distance. The latitude of *Babylon* will then, according to him, be $32^{\circ}37'$. He observes that even if the rate of going of a horseman at a walk be

reckoned at one league of 20 to a degree (and which I believe will generally be found to come near the truth), it will bring the latitude of Hillah to $32^{\circ} 32'$ and Babylon to $32^{\circ} 34'$, which comes nearer his observation than that of Niebuhr. (See *Mém. de l'Acad. des Inscr.*, vol. xlviii. p. 31.) I hope on my next visit to Babylon to ascertain correctly its longitude and latitude, both by astronomical observations and measurement. In my sketch the magnetic variation was not allowed; it is at Bagdad $8^{\circ} 44'$ west, and at Bussora, 9° .

(F.) Page 169.

It appears on examination that the Brouss or Broussa of M. Beauchamp* is no other than the Birs Nemroud (which Major Rennell calls throughout the "Remarks" Nimrod Birs). The situation two leagues south-east of Hillah, and the name, which seems to be only a corrupt pronunciation of Birs or Burs, all sufficiently point out the correspondence between the Birs Nemroud and Brouss. It is true, Beauchamp says it is only one league from the banks of the river; and Major Rennell, in his Sketch, makes it rather more than two; but Beauchamp was never at the Birs himself; and he must either speak from mere conjecture, or from the careless report of some person of the country.

Major Rennell says that the Broussa of Beauchamp is called Boursa by the Arabs, and he concludes it to be the Barsita of Ptolemy, or Borsippa of Strabo. It would appear that he has some other authority for *Boursa*, which he does not mention. Boursa in Arabic means a sandy desert, or the dwelling-places of evil spirits, either being very remote from the appellation of Celestial, which d'Anville gives it in fixing it at Samawa, much lower down the

* Geog. of Herod., p. 370. *Mém. de l'Acad.*, vol. xlviii.

Euphrates. In my first Memoir I speak of the ruins of Boursa near the village of Jerbouiya, which is about four leagues below Hillah, and about half an hour from the river. I only met with one man at Hillah who recognised the name of *Boursa*; and he was found out for me by the governor. It is necessary here to explain that I asked for *Boursa* by name, from having just read the passage in the Geography of Herodotus relating to it. This I am aware is a mode of inquiry which sometimes in the East leads to error; but whatever may be thought of the *name*, I have no doubt concerning the ruins at Jerbouiya, which I have heard described by several persons who had visited them. Should any one be tempted to imagine, from the similarity of names, and the conjecture that Boursa is Borsippa, that the ruins of the Birs Nemroud are those of the sacred Tower of the Chaldeans, I can only appeal to the appearance of the Birs itself. To suppose that the Birs is Borsippa, and not Babylon, would be to believe that there existed a temple and tower at the former place perfectly resembling the gigantic monument of Belus, both in form and proportions; and that the Temple of Borsippa has resisted the hand of time, which has obliterated that of Babylon.

I must not finish this Memoir without correcting two inaccuracies of my former one. Tahmasia was, I find, built by Shah Tahmas, and not by Nadir Shah, as I was inaccurately informed at Hillah; and the Khan half-way between Bagdad and Hillah is not called Khan Bir Yunus, or Jonas's Well, but Bir-un-nous (incorrectly for *nisf*), *i. e.* The Well of the Half-way.

APPENDIX.

BABYLONIAN ANTIQUES.

HAVING given an account of the ruins of Babylon, it will perhaps be expected that I should describe the monuments of the arts, manners, and religion of past ages which are found among them, and which are as yet but imperfectly known to the public. But to enter fully into this subject would require an attention of which I am not now capable, and time which I have it not in my power to bestow. I must therefore at present content myself with merely offering specimens of some of the most interesting of these fragments; and I console myself with the hope that I may thus supply some materials to those who are infinitely more capable of using them than I can ever expect to be.

Hillah is the general depôt for antiques found throughout all this country, especially on the banks of the Euphrates, from Raka to Samawa.* The most interesting of these antiques are the Sassanian and Babylonian. It is of the latter only of which I

* I have even been offered at Hillah English and Russian copper coins, common European seals of false carnelian, and a head of Frederick the Great in blue glass!

now propose to speak. Most of them contain specimens of the very curious and primitive system of writing found only in the Babylonian monuments; and those of Persia of the age of its history.* The cuneiform, or, as it has sometimes been called, the arrow-headed, character baffled the ingenuity of the decipherer, till Dr. Grotefend of Frankfort, undeterred by the ill success of his predecessors, applied himself to the task with a judgment and resolution which secured success. The result, so creditable to his industry and learning, and the process by which he obtained it, which he very ingenuously submits to the public, are to be found partly in Prof. Heeren's work on the Politics, Intercourse, and Commerce of the principal Nations of Antiquity,† and partly in the fourth and fifth volumes of the *Mines de l'Orient*; but it is to be hoped that he will soon be prevailed

* In the first period of the history of Persia I include the whole of its sovereigns down to the extinction of the native race by the Macedonian conquest, without any reference to the fanciful divisions of Ferdusi in his string of romances, which has by some unaccountably been entitled an epic poem, and by others, a history. It probably bears the same relation to the ancient history of Persia as the romances of Brute and the acts of Arthur's worthies do to that of Britain. Dr. Grotefend's first efforts have already done something towards maintaining the veracity of the venerable historians of Greece against the fictions of Mohammedan Persian literature; and much more may be expected, provided we can obtain a more intimate acquaintance with the Zend and other ancient languages of Persia, which is an object highly worthy the attention of our learned countrymen in India.

† *Ideen über die Politik, den Verkehr und den Handel der vornehmsten Völker der alten Welt*, by Prof. A. H. L. Heeren, 3rd edition, Gottingen, 1815,—a very interesting work, which ought to be translated into English.

upon to communicate to the world his valuable labours in a separate and more perfect form.

Dr. Grotefend, who professes to be rather the decipherer than the translator of the cuneiform inscriptions, and who engages merely to open the way to those whose attention has been much devoted to the study of the ancient languages of Persia, has however succeeded in translating some of the inscriptions on the ruins of Persepolis, and one from those of Pasargadæ. He observes that there are three varieties of those inscriptions distinguished from each other by the greater complication of the characters formed by the radical signs of a wedge (or arrow) and an angle. Each inscription is repeated in all the three species. The first or simplest species deciphered by Dr. Grotefend is in Zend, the language of Ecbatana; and there are grounds for believing that the remaining ones are translations into the languages of the other capitals of the Persian empire, Susa and Babylon. This conjecture acquires force from the fact of one of the species of cuneiform writing discovered at Babylon corresponding, or nearly so, with one of the Persepolitan species.

The cuneiform is the most ancient character of which we have any knowledge. It is difficult to say in what country it was invented; but its use was common to the great nations of antiquity, the Median, Persian, and Assyrian; and, as Prof. Heeren very justly observes, it is in all likelihood

the *Assyrian writing* of Herodotus, and that which Darius Hystaspes engraved on the pillars which he set up on the banks of the Bosphorus. The inscriptions deciphered by Dr. Grotefend are of the times of Cyrus, Darius Hystaspes, and Xerxes. Notwithstanding the obscurity in which its history is involved, it is not difficult to fix the period in which it fell into disuse. From its peculiar form it is evident that it must have been confined, like the sacred character of the Egyptians, to inscriptions on stone and other hard substances; and there must consequently have been another mode of writing better calculated for ordinary use, which probably resembled the Zend character of Anquetil-Duperron. The sacred or lapidary character must have fallen into disuse upon Alexander's conquest, when neither the Persians nor Babylonians had any monuments to erect or events to record. The native princes who wrested the throne of Persia from his feeble successors adopted the Greek language and character in their coins and inscriptions; and all recollection of the cuneiform writing must have perished during the long period in which they held the sceptre of Iran. The Sassanians, the professed restorers of the ancient rites and usages of Persia, could not therefore have had it in their power to recall the use of this obsolete mode of writing; and accordingly we find the monuments and coins of that dynasty inscribed with a character having an analogy with the Hebrew, Phenician, or Palmyrene, which has

been deciphered by the first orientalist of any age or country, in whose excellent work, “*Mémoires sur diverses Antiquités de la Perse*,” the fullest information on the Sassanian antiquities may be found.

The foregoing observations relate to the Persepolitan inscriptions. With respect to those of Babylon, Dr. Grotefend, from the scarcity of specimens, is yet only acquainted with two kinds; and he has not attempted to decipher them, though he has furnished some useful tables of comparison for those who may be inclined to attempt the task.* Adopting his principles of classification, I shall divide the Babylonian inscriptions into three species, in the order of their complication. I have attempted to account for the co-existence of three different writings and languages in the Persepolitan inscriptions. For the reason of there being three species of Babylonian writing, of which one only corresponds with those of Persepolis, I cannot offer any probable conjecture. They are never found together, or in the same antiquities, as in Persia; but the supposition of different ages will not solve the difficulty. A strict comparison of the different kinds will show whether or no they express different languages.†

* See *Mines de l'Orient*, vol. iv. and v.

† In the moment of sending off this Memoir I saw a letter from Dr. Grotefend, by which it appears that that learned and ingenious person, from a close examination of some specimens which have recently been communicated to him, is of opinion that the three species of Babylonian writing here spoken of are only varieties of different modes of writing the same characters, and that there is in fact but

No. 1 is a black stone of an irregular shape (in part broken and defaced), about one foot in length and $7\frac{1}{2}$ inches in breadth. The figures on it, *a* and *b*, have been supposed to represent the zodiac of the Babylonians: *c* is all that is now legible of the inscription which once covered the lower part of the stone, and is in the first species of Babylonian cuneiform writing. I saw an antique perfectly resembling this in the Royal Library at Paris, and I believe it has been described by Mr. Millin and noticed by Dr. Grotefend. This stone was brought to me by a peasant while I was examining the ruins of Babylon.

No. 2 is a stone two feet in length, nineteen in breadth, and nine inches in thickness: it is broken at the bottom. On the front is the sculpture *a*, and on the right side the inscription *b* belonging to the first species.

No. 3 is a head of red granite, a little larger than the drawing. It contains the inscription *b*, which is somewhat defaced, but which also appears to be of the first species. The antique *c* is a brass ornament which I found in a coffin with a skeleton in the Mujelibè, and is introduced here for the purpose of comparison with *a*. Both appear to have been destined for the same use; and in place of the ring or shank by which the brass ornament was sus-

one real kind of Babylonian cuneiform writing. Those who consider the importance of the undertaking will rejoice to learn that Dr. Grotefend is prosecuting his inquiries with unremitting ardour.

pended, there is a hole drilled through *a*. The age of *b* is sufficiently evident from its character and appearance ; and that of *a* is placed beyond all doubt by the cuneiform inscription : from both, the antiquity of the skeleton may be inferred. *a* was brought to me at Bagdad from Hillah, but I have not been able to discover in what part of the ruins it was found. The first species of Babylonian cuneiform writing agrees with the third Persepolitan.

No. 4 is an inscription copied from a piece of baked clay, in shape like a barrel, being thicker in the centre than at the ends. It is $4\frac{3}{4}$ inches long and $1\frac{1}{2}$ in diameter. The inscription is perfect, and the lacunæ which are seen in the copy are not illegible places, but exist in the original. The character is in the second species of cuneiform writing, of which no specimen has hitherto been published. This species also occurs on small pieces of baked clay of a darker and finer quality than the bricks ; they are generally covered with writing, and have also sometimes figures on the edges in slight relief. I found some of these pieces of clay in the sewer or subterranean canal at the foundations of the Kasr, the antiquity of which is thus in some measure established. To ascertain in what particular part of the ruins each antique is found, is a curious and important subject of investigation ; but one which the little reliance that can be placed on the words of the natives, and the extraordinary manner in which they sometimes deceive without the slightest ap-

parent motive, render very difficult. I shall, however, never lose sight of it.

No. 5 is a small piece of clay of this size, which contains an inscription only on one side. The writing is of the second species, and the letters slope a little, which is frequently the case in inscriptions of this kind.

I have lately received a small piece of brick of a very fine quality, with a varnished surface, from Mousul. It was found among the ruins of Nineveh, and contains an inscription in cuneiform letters so minute and difficult to read that I have not yet been able to determine to what class it is to be assigned.

The third class of Babylonian writing is that found on the bricks and cylinders. The Babylonian bricks have been described in other places, and some specimens of them are already before the public. The antiquary is aware that the custom of stamping letters on bricks was not peculiar to Babylon, and that examples of it occur in the ruins of Greece. Among the scanty remains of Seleucia on the Tigris I found numbers of bricks with impressions on them ; but from the coarseness of the materials and inferiority of workmanship I have never been able to discover any writing. The stamps with which the bricks of Babylon are impressed are, on the contrary, cut very neatly and applied with care ; and even some precaution appears to have been taken to preserve the writing, for they are all placed with their faces or written part down-

wards; and, what is very remarkable, when laid in bitumen, that cement is never found adhering to the face, though it always sticks to the back of the brick. The people employed in the ruins of Babylon to procure bricks told me that this was effected by strewing some powdered lime over the bitumen when the brick was laid on its face in it: but I know not what authority they have for this opinion. In my first Memoir I doubted that reeds had ever been employed where bitumen was used; I have since seen some bricks with bitumen adhering to them, on which the impression of a reed mat was so strongly marked as to induce me to change my opinion.

The number and variety of the stamps bear no proportion to the number of the bricks. I have as yet only seen four kinds, with some varieties of each.

No. 6 is an inscription of seven lines, of which Dr. Grotefend has only seen an imperfect copy. Septilinear inscription is the most common of all: out of nineteen bricks taken at random, fourteen were of this sort. There are several varieties of this kind, differing from each other only in a character or two.

No. 7 is an inscription of six lines. The specimen here given is remarkable by deviating in many places from the other kind of brick inscriptions, especially in the omission of almost the whole series of characters which form the fifth line in the septilinear inscriptions.

No. 8 is an inscription of three lines. One of this kind has been seen by Dr. Grotefend, from which this specimen differs a little.

No. 9 is an inscription in four lines, which is the rarest kind of all, and no specimen of it has ever been published.

The Babylonian cylinders are among the most remarkable and interesting of the antiques. They are from one to three inches in length: some are of stone, and others apparently of paste or composition of various kinds. Sculptures from several of these cylinders have been published in different works; and Nos. 10, 11, 12, 13, and 14 are specimens of my own collection. Some of them have cuneiform writing on them (as in Nos. 12 and 13) which is of the third species; but has the remarkable peculiarity that it is reversed, or written from right to left, every other kind of cuneiform writing being incontestably to be read from left to right. This can only be accounted for by supposing they were intended to roll off impressions. The cylinder No. 11 was found in the site of Nineveh. I must not omit mentioning in this place, that a Babylonian cylinder was not long ago found in digging in the field of Marathon, and is now in the possession of Mr. Fauvel of Athens. The cylinders are said to be chiefly found in the ruins at Jerbouiya. The people of this country are fond of using them as amulets, and the Persian pilgrims who come to the shrines of Ali and Hossein frequently carry back with them some of these curiosities.

Small figures of brass or copper are also found at Babylon. No Babylonian coins have as yet been discovered, nor have I ever seen any Darics brought from Hillah. The true Babylonian antiques are generally finished with the utmost care and delicacy, whilst the Sassanian (which may possibly form the subject of a further Memoir) are of the rudest design and execution.

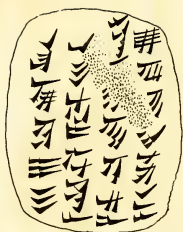


𐎠𐎡𐎢𐎣𐎤𐎥𐎦𐎧𐎨𐎩𐎪𐎫𐎬𐎭𐎮𐎯𐎰𐎱𐎲𐎳𐎴𐎵𐎶𐎷𐎸𐎹𐎺𐎻𐎼𐎽𐎾𐎿𐏀𐏁𐏂𐏃𐏄𐏅𐏆𐏇𐏈𐏉𐏊𐏋𐏌𐏍𐏎𐏏𐏐𐏑𐏒𐏓𐏔𐏕𐏖𐏗𐏘𐏙𐏚𐏛𐏜𐏝𐏞𐏟𐏠𐏡𐏢𐏣𐏤𐏥𐏦𐏧𐏨𐏩𐏪𐏫𐏬𐏭𐏮𐏯𐏰𐏱𐏲𐏳𐏴𐏵𐏶𐏷𐏸𐏹𐏺𐏻𐏼𐏽𐏾𐏿𐐀𐐁𐐂𐐃𐐄𐐅𐐆𐐇𐐈𐐉𐐊𐐋𐐌𐐍𐐎𐐏𐐐𐐑𐐒𐐓𐐔𐐕𐐖𐐗𐐘𐐙𐐚𐐛𐐜𐐝𐐞𐐟𐐠𐐡𐐢𐐣𐐤𐐥𐐦𐐧𐐨𐐩𐐪𐐫𐐬𐐭𐐮𐐯𐐰𐐱𐐲𐐳𐐴𐐵𐐶𐐷𐐸𐐹𐐺𐐻𐐼𐐽𐐾𐐿𐑀𐑁𐑂𐑃𐑄𐑅𐑆𐑇𐑈𐑉𐑊𐑋𐑌𐑍𐑎𐑏𐑐𐑑𐑒𐑓𐑔𐑕𐑖𐑗𐑘𐑙𐑚𐑛𐑜𐑝𐑞𐑟𐑠𐑡𐑢𐑣𐑤𐑥𐑦𐑧𐑨𐑩𐑪𐑫𐑬𐑭𐑮𐑯𐑰𐑱𐑲𐑳𐑴𐑵𐑶𐑷𐑸𐑹𐑺𐑻𐑼𐑽𐑾𐑿𐒀𐒁𐒂𐒃𐒄𐒅𐒆𐒇𐒈𐒉𐒊𐒋𐒌𐒍𐒎𐒏𐒐𐒑𐒒𐒓𐒔𐒕𐒖𐒗𐒘𐒙𐒚𐒛𐒜𐒝𐒞𐒟𐒠𐒡𐒢𐒣𐒤𐒥𐒦𐒧𐒨𐒩𐒪𐒫𐒬𐒭𐒮𐒯𐒰𐒱𐒲𐒳𐒴𐒵𐒶𐒷𐒸𐒹𐒺𐒻𐒼𐒽𐒾𐒿𐓀𐓁𐓂𐓃𐓄𐓅𐓆𐓇𐓈𐓉𐓊𐓋𐓌𐓍𐓎𐓏𐓐𐓑𐓒𐓓𐓔𐓕𐓖𐓗𐓘𐓙𐓚𐓛𐓜𐓝𐓞𐓟𐓠𐓡𐓢𐓣𐓤𐓥𐓦𐓧𐓨𐓩𐓪𐓫𐓬𐓭𐓮𐓯𐓰𐓱𐓲𐓳𐓴𐓵𐓶𐓷𐓸𐓹𐓺𐓻𐓼𐓽𐓾𐓿𐔀𐔁𐔂𐔃𐔄𐔅𐔆𐔇𐔈𐔉𐔊𐔋𐔌𐔍𐔎𐔏𐔐𐔑𐔒𐔓𐔔𐔕𐔖𐔗𐔘𐔙𐔚𐔛𐔜𐔝𐔞𐔟𐔠𐔡𐔢𐔣𐔤𐔥𐔦𐔧𐔨𐔩𐔪𐔫𐔬𐔭𐔮𐔯𐔰𐔱𐔲𐔳𐔴𐔵𐔶𐔷𐔸𐔹𐔺𐔻𐔼𐔽𐔾𐔿𐕀𐕁𐕂𐕃𐕄𐕅𐕆𐕇𐕈𐕉𐕊𐕋𐕌𐕍𐕎𐕏𐕐𐕑𐕒𐕓𐕔𐕕𐕖𐕗𐕘𐕙𐕚𐕛𐕜𐕝𐕞𐕟𐕠𐕡𐕢𐕣𐕤𐕥𐕦𐕧𐕨𐕩𐕪𐕫𐕬𐕭𐕮𐕯𐕰𐕱𐕲𐕳𐕴𐕵𐕶𐕷𐕸𐕹𐕺𐕻𐕼𐕽𐕾𐕿𐖀𐖁𐖂𐖃𐖄𐖅𐖆𐖇𐖈𐖉𐖊𐖋𐖌𐖍𐖎𐖏𐖐𐖑𐖒𐖓𐖔𐖕𐖖𐖗𐖘𐖙𐖚𐖛𐖜𐖝𐖞𐖟𐖠𐖡𐖢𐖣𐖤𐖥𐖦𐖧𐖨𐖩𐖪𐖫𐖬𐖭𐖮𐖯𐖰𐖱𐖲𐖳𐖴𐖵𐖶𐖷𐖸𐖹𐖺𐖻𐖼𐖽𐖾𐖿𐗀𐗁𐗂𐗃𐗄𐗅𐗆𐗇𐗈𐗉𐗊𐗋𐗌𐗍𐗎𐗏𐗐𐗑𐗒𐗓𐗔𐗕𐗖𐗗𐗘𐗙𐗚𐗛𐗜𐗝𐗞𐗟𐗠𐗡𐗢𐗣𐗤𐗥𐗦𐗧𐗨𐗩𐗪𐗫𐗬𐗭𐗮𐗯𐗰𐗱𐗲𐗳𐗴𐗵𐗶𐗷𐗸𐗹𐗺𐗻𐗼𐗽𐗾𐗿𐘀𐘁𐘂𐘃𐘄𐘅𐘆𐘇𐘈𐘉𐘊𐘋𐘌𐘍𐘎𐘏𐘐𐘑𐘒𐘓𐘔𐘕𐘖𐘗𐘘𐘙𐘚𐘛𐘜𐘝𐘞𐘟𐘠𐘡𐘢𐘣𐘤𐘥𐘦𐘧𐘨𐘩𐘪𐘫𐘬𐘭𐘮𐘯𐘰𐘱𐘲𐘳𐘴𐘵𐘶𐘷𐘸𐘹𐘺𐘻𐘼𐘽𐘾𐘿𐙀𐙁𐙂𐙃𐙄𐙅𐙆𐙇𐙈𐙉𐙊𐙋𐙌𐙍𐙎𐙏𐙐𐙑𐙒𐙓𐙔𐙕𐙖𐙗𐙘𐙙𐙚𐙛𐙜𐙝𐙞𐙟𐙠𐙡𐙢𐙣𐙤𐙥𐙦𐙧𐙨𐙩𐙪𐙫𐙬𐙭𐙮𐙯𐙰𐙱𐙲𐙳𐙴𐙵𐙶𐙷𐙸𐙹𐙺𐙻𐙼𐙽𐙾𐙿𐚀𐚁𐚂𐚃𐚄𐚅𐚆𐚇𐚈𐚉𐚊𐚋𐚌𐚍𐚎𐚏𐚐𐚑𐚒𐚓𐚔𐚕𐚖𐚗𐚘𐚙𐚚𐚛𐚜𐚝𐚞𐚟𐚠𐚡𐚢𐚣𐚤𐚥𐚦𐚧𐚨𐚩𐚪𐚫𐚬𐚭𐚮𐚯𐚰𐚱𐚲𐚳𐚴𐚵𐚶𐚷𐚸𐚹𐚺𐚻𐚼𐚽𐚾𐚿𐛀𐛁𐛂𐛃𐛄𐛅𐛆𐛇𐛈𐛉𐛊𐛋𐛌𐛍𐛎𐛏𐛐𐛑𐛒𐛓𐛔𐛕𐛖𐛗𐛘𐛙𐛚𐛛𐛜𐛝𐛞𐛟𐛠𐛡𐛢𐛣𐛤𐛥𐛦𐛧𐛨𐛩𐛪𐛫𐛬𐛭𐛮𐛯𐛰𐛱𐛲𐛳𐛴𐛵𐛶𐛷𐛸𐛹𐛺𐛻𐛼𐛽𐛾𐛿𐜀𐜁𐜂𐜃𐜄𐜅𐜆𐜇𐜈𐜉𐜊𐜋𐜌𐜍𐜎𐜏𐜐𐜑𐜒𐜓𐜔𐜕𐜖𐜗𐜘𐜙𐜚𐜛𐜜𐜝𐜞𐜟𐜠𐜡𐜢𐜣𐜤𐜥𐜦𐜧𐜨𐜩𐜪𐜫𐜬𐜭𐜮𐜯𐜰𐜱𐜲𐜳𐜴𐜵𐜶𐜷𐜸𐜹𐜺𐜻𐜼𐜽𐜾𐜿𐝀𐝁𐝂𐝃𐝄𐝅𐝆𐝇𐝈𐝉𐝊𐝋𐝌𐝍𐝎𐝏𐝐𐝑𐝒𐝓𐝔𐝕𐝖𐝗𐝘𐝙𐝚𐝛𐝜𐝝𐝞𐝟𐝠𐝡𐝢𐝣𐝤𐝥𐝦𐝧𐝨𐝩𐝪𐝫𐝬𐝭𐝮𐝯𐝰𐝱𐝲𐝳𐝴𐝵𐝶𐝷𐝸𐝹𐝺𐝻𐝼𐝽𐝾𐝿𐞀𐞁𐞂𐞃𐞄𐞅𐞆𐞇𐞈𐞉𐞊𐞋𐞌𐞍𐞎𐞏𐞐𐞑𐞒𐞓𐞔𐞕𐞖𐞗𐞘𐞙𐞚𐞛𐞜𐞝𐞞𐞟𐞠𐞡𐞢𐞣𐞤𐞥𐞦𐞧𐞨𐞩𐞪𐞫𐞬𐞭𐞮𐞯𐞰𐞱𐞲𐞳𐞴𐞵𐞶𐞷𐞸𐞹𐞺𐞻𐞼𐞽𐞾𐞿𐟀𐟁𐟂𐟃𐟄𐟅𐟆𐟇𐟈𐟉𐟊𐟋𐟌𐟍𐟎𐟏𐟐𐟑𐟒𐟓𐟔𐟕𐟖𐟗𐟘𐟙𐟚𐟛𐟜𐟝𐟞𐟟𐟠𐟡𐟢𐟣𐟤𐟥𐟦𐟧𐟨𐟩𐟪𐟫𐟬𐟭𐟮𐟯𐟰𐟱𐟲𐟳𐟴𐟵𐟶𐟷𐟸𐟹𐟺𐟻𐟼𐟽𐟾𐟿𐠀𐠁𐠂𐠃𐠄𐠅𐠆𐠇𐠈𐠉𐠊𐠋𐠌𐠍𐠎𐠏𐠐𐠑𐠒𐠓𐠔𐠕𐠖𐠗𐠘𐠙𐠚𐠛𐠜𐠝𐠞𐠟𐠠𐠡𐠢𐠣𐠤𐠥𐠦𐠧𐠨𐠩𐠪𐠫𐠬𐠭𐠮𐠯𐠰𐠱𐠲𐠳𐠴𐠵𐠶𐠷𐠸𐠹𐠺𐠻𐠼𐠽𐠾𐠿𐡀𐡁𐡂𐡃𐡄𐡅𐡆𐡇𐡈𐡉𐡊𐡋𐡌𐡍𐡎𐡏𐡐𐡑𐡒𐡓𐡔𐡕𐡖𐡗𐡘𐡙𐡚𐡛𐡜𐡝𐡞𐡟𐡠𐡡𐡢𐡣𐡤𐡥𐡦𐡧𐡨𐡩𐡪𐡫𐡬𐡭𐡮𐡯𐡰𐡱𐡲𐡳𐡴𐡵𐡶𐡷𐡸𐡹𐡺𐡻𐡼𐡽𐡾𐡿𐢀𐢁𐢂𐢃𐢄𐢅𐢆𐢇𐢈𐢉𐢊𐢋𐢌𐢍𐢎𐢏𐢐𐢑𐢒𐢓𐢔𐢕𐢖𐢗𐢘𐢙𐢚𐢛𐢜𐢝𐢞𐢟𐢠𐢡𐢢𐢣𐢤𐢥𐢦𐢧𐢨𐢩𐢪𐢫𐢬𐢭𐢮𐢯𐢰𐢱𐢲𐢳𐢴𐢵𐢶𐢷𐢸𐢹𐢺𐢻𐢼𐢽𐢾𐢿𐣀𐣁𐣂𐣃𐣄𐣅𐣆𐣇𐣈𐣉𐣊𐣋𐣌𐣍𐣎𐣏𐣐𐣑𐣒𐣓𐣔𐣕𐣖𐣗𐣘𐣙𐣚𐣛𐣜𐣝𐣞𐣟𐣠𐣡𐣢𐣣𐣤𐣥𐣦𐣧𐣨𐣩𐣪𐣫𐣬𐣭𐣮𐣯𐣰𐣱𐣲𐣳𐣴𐣵𐣶𐣷𐣸𐣹𐣺𐣻𐣼𐣽𐣾𐣿𐤀𐤁𐤂𐤃𐤄𐤅𐤆𐤇𐤈𐤉𐤊𐤋𐤌𐤍𐤎𐤏𐤐𐤑𐤒𐤓𐤔𐤕𐤖𐤗𐤘𐤙𐤚𐤛𐤜𐤝𐤞𐤟𐤠𐤡𐤢𐤣𐤤𐤥𐤦𐤧𐤨𐤩𐤪𐤫𐤬𐤭𐤮𐤯𐤰𐤱𐤲𐤳𐤴𐤵𐤶𐤷𐤸𐤹𐤺𐤻𐤼𐤽𐤾𐤿𐥀𐥁𐥂𐥃𐥄𐥅𐥆𐥇𐥈𐥉𐥊𐥋𐥌𐥍𐥎𐥏𐥐𐥑𐥒𐥓𐥔𐥕𐥖𐥗𐥘𐥙𐥚𐥛𐥜𐥝𐥞𐥟𐥠𐥡𐥢𐥣𐥤𐥥𐥦𐥧𐥨𐥩𐥪𐥫𐥬𐥭𐥮𐥯𐥰𐥱𐥲𐥳𐥴𐥵𐥶𐥷𐥸𐥹𐥺𐥻𐥼𐥽𐥾𐥿𐦀𐦁𐦂𐦃𐦄𐦅𐦆𐦇𐦈𐦉𐦊𐦋𐦌𐦍𐦎𐦏𐦐𐦑𐦒𐦓𐦔𐦕𐦖𐦗𐦘𐦙𐦚𐦛𐦜𐦝𐦞𐦟𐦠𐦡𐦢𐦣𐦤𐦥𐦦𐦧𐦨𐦩𐦪𐦫𐦬𐦭𐦮𐦯𐦰𐦱𐦲𐦳𐦴𐦵𐦶𐦷𐦸𐦹𐦺𐦻𐦼𐦽𐦾𐦿𐧀𐧁𐧂𐧃𐧄𐧅𐧆𐧇𐧈𐧉𐧊𐧋𐧌𐧍𐧎𐧏𐧐𐧑𐧒𐧓𐧔𐧕𐧖𐧗𐧘𐧙𐧚𐧛𐧜𐧝𐧞𐧟𐧠𐧡𐧢𐧣𐧤𐧥𐧦𐧧𐧨𐧩𐧪𐧫𐧬𐧭𐧮𐧯𐧰𐧱𐧲𐧳𐧴𐧵𐧶𐧷𐧸𐧹𐧺𐧻𐧼𐧽𐧾𐧿𐨀𐨁𐨂𐨃𐨄𐨅𐨆𐨇𐨈𐨉𐨊𐨋𐨌𐨍𐨎𐨏𐨐𐨑𐨒𐨓𐨔𐨕𐨖𐨗𐨘𐨙𐨚𐨛𐨜𐨝𐨞𐨟𐨠𐨡𐨢𐨣𐨤𐨥𐨦𐨧𐨨𐨩𐨪𐨫𐨬𐨭𐨮𐨯𐨰𐨱𐨲𐨳𐨴𐨵𐨶𐨷𐨹𐨺𐨸𐨻𐨼𐨽𐨾𐨿𐩀𐩁𐩂𐩃𐩄𐩅𐩆𐩇𐩈𐩉𐩊𐩋𐩌𐩍𐩎𐩏𐩐𐩑𐩒𐩓𐩔𐩕𐩖𐩗𐩘𐩙𐩚𐩛𐩜𐩝𐩞𐩟𐩠𐩡𐩢𐩣𐩤𐩥𐩦𐩧𐩨𐩩𐩪𐩫𐩬𐩭𐩮𐩯𐩰𐩱𐩲𐩳𐩴𐩵𐩶𐩷𐩸𐩹𐩺𐩻𐩼𐩽𐩾𐩿𐪀𐪁𐪂𐪃𐪄𐪅𐪆𐪇𐪈𐪉𐪊𐪋𐪌𐪍𐪎𐪏𐪐𐪑𐪒𐪓𐪔𐪕𐪖𐪗𐪘𐪙𐪚𐪛𐪜𐪝𐪞𐪟𐪠𐪡𐪢𐪣𐪤𐪥𐪦𐪧𐪨𐪩𐪪𐪫𐪬𐪭𐪮𐪯𐪰𐪱𐪲𐪳𐪴𐪵𐪶𐪷𐪸𐪹𐪺𐪻𐪼𐪽𐪾𐪿𐫀𐫁𐫂𐫃𐫄𐫅𐫆𐫇𐫈𐫉𐫊𐫋𐫌𐫍𐫎𐫏𐫐𐫑𐫒𐫓𐫔𐫕𐫖𐫗𐫘𐫙𐫚𐫛𐫜𐫝𐫞𐫟𐫠𐫡𐫢𐫣𐫤𐫦𐫥𐫧𐫨𐫩𐫪𐫫𐫬𐫭𐫮𐫯𐫰𐫱𐫲𐫳𐫴𐫵𐫶𐫷𐫸𐫹𐫺𐫻𐫼𐫽𐫾𐫿𐬀𐬁𐬂𐬃𐬄𐬅𐬆𐬇𐬈𐬉𐬊𐬋𐬌𐬍𐬎𐬏𐬐𐬑𐬒𐬓𐬔𐬕𐬖𐬗𐬘𐬙𐬚𐬛𐬜𐬝𐬞𐬟𐬠𐬡𐬢𐬣𐬤𐬥𐬦𐬧𐬨𐬩𐬪𐬫𐬬𐬭𐬮𐬯𐬰𐬱𐬲𐬳𐬴𐬵𐬶𐬷𐬸𐬹𐬺𐬻𐬼𐬽𐬾𐬿𐭀𐭁𐭂𐭃𐭄𐭅𐭆𐭇𐭈𐭉𐭊𐭋𐭌𐭍𐭎𐭏𐭐𐭑𐭒𐭓𐭔𐭕𐭖𐭗𐭘𐭙𐭚𐭛𐭜𐭝𐭞𐭟𐭠𐭡𐭢𐭣𐭤𐭥𐭦𐭧𐭨𐭩𐭪𐭫𐭬𐭭𐭮𐭯𐭰𐭱𐭲𐭳𐭴𐭵𐭶𐭷𐭸𐭹𐭺𐭻𐭼𐭽𐭾𐭿𐮀𐮁𐮂𐮃𐮄𐮅𐮆𐮇𐮈𐮉𐮊𐮋𐮌𐮍𐮎𐮏𐮐𐮑𐮒𐮓𐮔𐮕𐮖𐮗𐮘𐮙𐮚𐮛𐮜𐮝𐮞𐮟𐮠𐮡𐮢𐮣𐮤𐮥𐮦𐮧𐮨𐮩𐮪𐮫𐮬𐮭𐮮𐮯𐮰𐮱𐮲𐮳𐮴𐮵𐮶𐮷𐮸𐮹𐮺𐮻𐮼𐮽𐮾𐮿𐯀𐯁𐯂𐯃𐯄𐯅𐯆𐯇𐯈𐯉𐯊𐯋𐯌𐯍𐯎𐯏𐯐𐯑𐯒𐯓𐯔𐯕𐯖𐯗𐯘𐯙𐯚𐯛𐯜𐯝𐯞𐯟𐯠𐯡𐯢𐯣𐯤𐯥𐯦𐯧𐯨𐯩𐯪𐯫𐯬𐯭𐯮𐯯𐯰𐯱𐯲𐯳𐯴𐯵𐯶𐯷𐯸𐯹𐯺𐯻𐯼𐯽𐯾𐯿𐰀𐰁𐰂𐰃𐰄𐰅𐰆𐰇𐰈𐰉𐰊𐰋𐰌𐰍𐰎𐰏𐰐𐰑𐰒𐰓𐰔𐰕𐰖𐰗𐰘𐰙𐰚𐰛𐰜𐰝𐰞𐰟𐰠𐰡𐰢𐰣𐰤𐰥𐰦𐰧𐰨𐰩𐰪𐰫𐰬𐰭𐰮𐰯𐰰𐰱𐰲𐰳𐰴𐰵𐰶𐰷𐰸𐰹𐰺𐰻𐰼𐰽𐰾𐰿𐱀𐱁𐱂𐱃𐱄𐱅𐱆𐱇𐱈𐱉𐱊𐱋𐱌𐱍𐱎𐱏𐱐𐱑𐱒𐱓𐱔𐱕𐱖𐱗𐱘𐱙𐱚𐱛𐱜𐱝𐱞𐱟𐱠𐱡𐱢𐱣𐱤𐱥𐱦𐱧𐱨𐱩𐱪𐱫𐱬𐱭𐱮𐱯𐱰𐱱𐱲𐱳𐱴𐱵𐱶𐱷𐱸𐱹𐱺𐱻𐱼𐱽𐱾𐱿𐲀𐲁𐲂𐲃𐲄𐲅𐲆𐲇𐲈𐲉𐲊𐲋𐲌𐲍𐲎𐲏𐲐𐲑𐲒𐲓𐲔𐲕𐲖𐲗𐲘𐲙𐲚𐲛𐲜𐲝𐲞𐲟𐲠𐲡𐲢𐲣𐲤𐲥𐲦𐲧𐲨𐲩𐲪𐲫𐲬𐲭𐲮𐲯𐲰𐲱𐲲𐲳𐲴𐲵𐲶𐲷𐲸𐲹𐲺𐲻𐲼𐲽𐲾𐲿𐳀𐳁𐳂𐳃𐳄𐳅𐳆𐳇𐳈𐳉𐳊𐳋𐳌𐳍𐳎𐳏𐳐𐳑𐳒𐳓𐳔𐳕𐳖𐳗𐳘𐳙𐳚𐳛𐳜𐳝𐳞𐳟𐳠𐳡𐳢𐳣𐳤𐳥𐳦𐳧𐳨𐳩𐳪𐳫𐳬𐳭𐳮𐳯𐳰𐳱𐳲𐳳𐳴𐳵𐳶𐳷𐳸𐳹𐳺𐳻𐳼𐳽𐳾𐳿𐴀𐴁𐴂𐴃𐴄𐴅𐴆𐴇𐴈𐴉𐴊𐴋𐴌𐴍𐴎𐴏𐴐𐴑𐴒𐴓𐴔𐴕𐴖𐴗𐴘𐴙𐴚𐴛𐴜𐴝𐴞𐴟𐴠𐴡𐴢𐴣𐴤𐴥𐴦𐴧𐴨𐴩𐴪𐴫𐴬𐴭𐴮𐴯𐴰𐴱𐴲𐴳𐴴𐴵𐴶𐴷𐴸𐴹𐴺𐴻𐴼𐴽𐴾𐴿𐵀𐵁𐵂𐵃𐵄𐵅𐵆𐵇𐵈𐵉𐵊𐵋𐵌𐵍𐵎𐵏𐵐𐵑𐵒𐵓𐵔𐵕𐵖𐵗𐵘𐵙𐵚𐵛𐵜𐵝𐵞𐵟𐵠𐵡𐵢𐵣𐵤𐵥𐵦𐵧𐵨𐵩𐵪𐵫𐵬𐵭𐵮𐵯𐵰𐵱𐵲𐵳𐵴𐵵𐵶𐵷𐵸𐵹𐵺𐵻𐵼𐵽𐵾𐵿𐶀𐶁𐶂𐶃𐶄𐶅𐶆𐶇𐶈𐶉𐶊𐶋𐶌𐶍𐶎𐶏𐶐𐶑𐶒𐶓𐶔𐶕𐶖𐶗𐶘𐶙𐶚𐶛𐶜𐶝𐶞𐶟𐶠𐶡𐶢𐶣𐶤𐶥𐶦𐶧𐶨𐶩𐶪𐶫𐶬𐶭𐶮𐶯𐶰𐶱𐶲𐶳𐶴𐶵𐶶𐶷𐶸𐶹𐶺𐶻𐶼𐶽𐶾𐶿𐷀𐷁𐷂𐷃𐷄𐷅𐷆𐷇𐷈𐷉𐷊𐷋𐷌𐷍𐷎𐷏𐷐𐷑𐷒𐷓𐷔𐷕𐷖𐷗𐷘𐷙𐷚𐷛𐷜𐷝𐷞𐷟𐷠𐷡𐷢𐷣𐷤𐷥𐷦𐷧𐷨𐷩𐷪𐷫𐷬𐷭𐷮𐷯𐷰𐷱𐷲𐷳𐷴𐷵𐷶𐷷𐷸𐷹𐷺𐷻𐷼𐷽𐷾𐷿𐸀𐸁𐸂𐸃𐸄𐸅𐸆𐸇𐸈𐸉𐸊𐸋𐸌𐸍𐸎𐸏𐸐𐸑𐸒𐸓𐸔𐸕𐸖𐸗𐸘𐸙𐸚𐸛𐸜𐸝𐸞𐸟𐸠𐸡𐸢𐸣𐸤𐸥𐸦𐸧𐸨𐸩𐸪𐸫𐸬𐸭𐸮𐸯𐸰𐸱𐸲𐸳𐸴𐸵𐸶𐸷𐸸𐸹𐸺𐸻𐸼𐸽𐸾𐸿𐹀𐹁𐹂𐹃𐹄𐹅𐹆𐹇𐹈𐹉𐹊𐹋𐹌𐹍𐹎𐹏𐹐𐹑𐹒𐹓𐹔𐹕𐹖𐹗𐹘𐹙𐹚𐹛𐹜𐹝𐹞𐹟𐹠𐹡𐹢𐹣𐹤𐹥𐹦𐹧𐹨𐹩𐹪𐹫𐹬𐹭𐹮𐹯𐹰𐹱𐹲𐹳𐹴𐹵𐹶𐹷𐹸𐹹𐹺𐹻𐹼𐹽𐹾𐹿𐺀𐺁𐺂𐺃𐺄𐺅𐺆𐺇𐺈𐺉𐺊𐺋𐺌𐺍𐺎𐺏𐺐𐺑𐺒𐺓𐺔𐺕𐺖𐺗𐺘𐺙𐺚𐺛𐺜𐺝𐺞𐺟𐺠𐺡𐺢𐺣𐺤𐺥𐺦𐺧𐺨𐺩𐺪𐺫𐺬𐺭𐺮𐺯𐺰𐺱𐺲𐺳𐺴𐺵𐺶𐺷𐺸𐺹𐺺𐺻𐺼𐺽𐺾𐺿𐻀𐻁𐻂𐻃𐻄𐻅𐻆𐻇𐻈𐻉𐻊𐻋𐻌𐻍𐻎𐻏𐻐𐻑𐻒𐻓𐻔𐻕𐻖𐻗𐻘𐻙𐻚𐻛𐻜𐻝𐻞𐻟𐻠𐻡𐻢𐻣𐻤𐻥𐻦𐻧𐻨𐻩𐻪𐻫𐻬𐻭𐻮𐻯𐻰𐻱𐻲𐻳𐻴𐻵𐻶𐻷𐻸𐻹𐻺𐻻𐻼𐻽𐻾𐻿𐼀𐼁𐼂𐼃𐼄𐼅𐼆𐼇𐼈𐼉𐼊𐼋𐼌𐼍𐼎𐼏𐼐𐼑𐼒𐼓𐼔𐼕𐼖𐼗𐼘𐼙𐼚𐼛𐼜𐼝𐼞𐼟𐼠𐼡𐼢𐼣𐼤𐼥𐼦𐼧𐼨𐼩𐼪𐼫𐼬𐼭𐼮𐼯𐼰𐼱𐼲𐼳𐼴𐼵𐼶𐼷𐼸𐼹𐼺𐼻𐼼𐼽𐼾𐼿𐽀𐽁𐽂𐽃𐽄𐽅𐽆𐽇𐽋𐽍𐽎𐽏𐽐𐽈𐽉𐽊𐽌𐽑𐽒𐽓𐽔𐽕𐽖𐽗𐽘𐽙𐽚𐽛𐽜𐽝𐽞𐽟𐽠𐽡𐽢𐽣𐽤𐽥𐽦𐽧𐽨𐽩𐽪𐽫𐽬𐽭𐽮𐽯𐽰𐽱𐽲𐽳𐽴𐽵𐽶𐽷𐽸𐽹𐽺𐽻𐽼𐽽𐽾𐽿𐾀𐾁𐾃𐾅𐾂𐾄𐾆𐾇𐾈𐾉𐾊𐾋𐾌𐾍

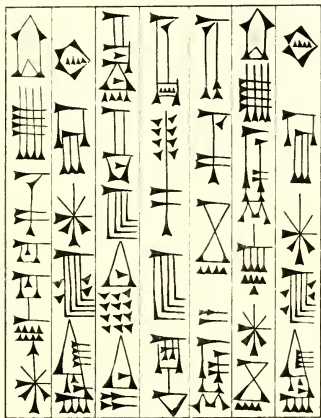
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London, J. Durand, Pabstmothe Row, 1838.

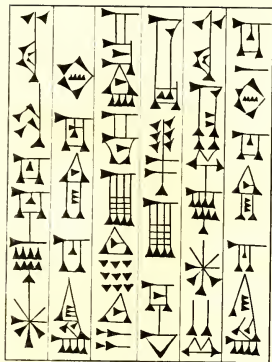
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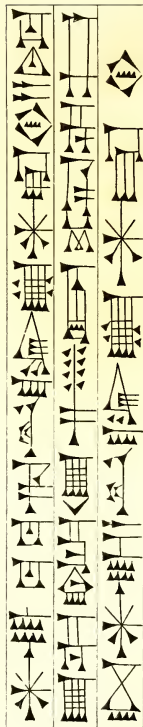
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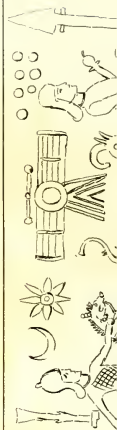
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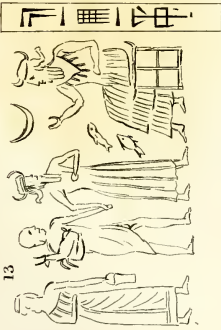
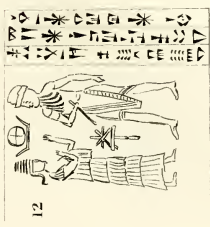


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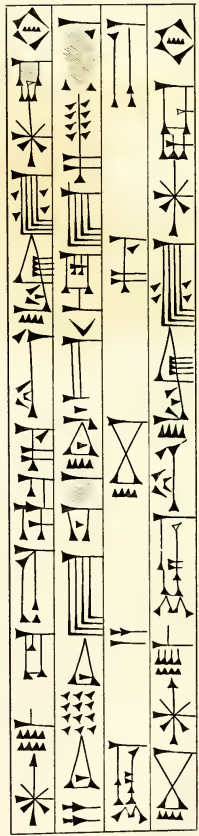
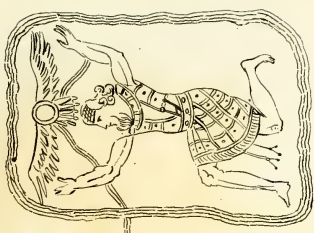


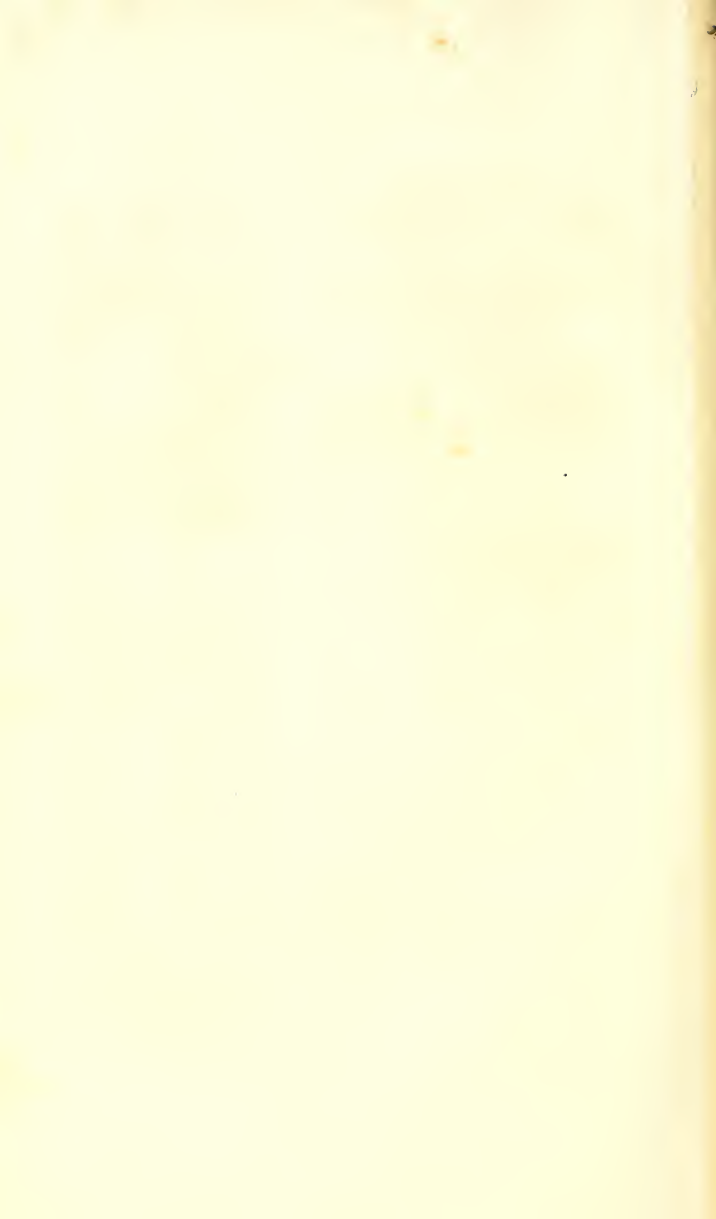
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J O U R N E Y

FROM

BUSSORA TO BUSHIRE, SHIRAUZ, PERSEPOLIS, &c.,

I N T H E Y E A R 1821;

T O W H I C H A R E A D D E D

C O P I E S O F S E V E R A L H I T H E R T O U N P U B L I S H E D

C U N E I F O R M I N S C R I P T I O N S A T P E R S E P O L I S,

B Y

C L A U D I U S J A M E S R I C H, E s q.

J O U R N E Y

FROM

BUSSORA TO BUSHIRE, SHIRAUZ, PERSEPOLIS, &c.

ON the 13th of June, 1821, we left Bussora for Bushire, in the Volunteer, Captain Waterman, at 1 P.M. Calms rendered our passage rather a tedious one, and the heat of the weather was very unpleasant. The hospitality of Captain Waterman, however, made ample amends for all these inconveniences ; and on the 17th, at 4 P.M., we ranged along the island of Karrack, and passed to the northward of the low flat island of Congo. On the 18th, in the morning, we came to an anchor in the inner roads of Bushire, a pilot having previously come off to conduct us across the spit of sand which separates the outer from the inner roads. The ship lay about a mile and a half or two miles from the town :—a spit of sand, uncovered at low water, runs out in a circular sweep, and separates the inner roads from the basin or harbour, which would be a very convenient one for shipping, provided the bar could be rendered practicable, which I think might be accomplished.

Bushire, or more properly Abu Sheher*, is situated on a peninsula formed by the basin or harbour on one side, in which direction the sea makes great inundations in spring-tides, and the sea on the other. The coast is shallow and dangerous, and ships' boats cannot approach it without great difficulty.

The new factory, where we were lodged, is situated at the southern extremity of the town, quite open to the sea, and in the most airy and agreeable spot in the place.

I was greatly struck with the difference between this place and Bussora, and as yet decidedly give Bushire the preference; but they say, during the calm weather in July and August, the heat is quite intolerable; not from the height of the thermometer, which rarely rises above 100°, but from the weight and humidity of the atmosphere.

The nights are said to be dreadful, and indeed I can believe it, from a specimen I had of one on my former passage down to India.

The common water of the place is brackish, nauseous, and of a strong purgative quality. At the factory we drank rain-water, which is soft and never cool.

When there is no wind at night the dew falls

* I find mention of Abu Sheher in the relation of a voyage by a deputy of the Prince of Selan, or Ceylon, to the Mameluke sovereign of Egypt, A.H. 682. Vide Quatremere's *Memoirs*, &c., vol. 2, p. 284, where are the names of several other places on the shores of the gulf.

with prodigious copiousness : no bad effects, however, follow from sleeping perfectly exposed to it, which doubtless proceeds from its being exhalations from the sea merely, and not corrupted by any vegetable matter.

All around Bushire is a dismal burnt brown flat, except at the distance of about four miles to the S. and E., where there is a line of date-trees.

The summer here is not unhealthy, but in the spring intermittent fevers are said to prevail, and further inland they are very common.

The surf at night, when there is a calm, makes a beautiful appearance, breaking in lines of phosphoric light along the shore. We have now a continued gale from the N.W. to W., which is rather a rarity at this season, the Shemaul* generally finishing before this, but hitherto this year they have scarcely had any of this wind.

On the 26th the Volunteer sailed for Bombay. As my stay here was uncertain, I was anxious to get Mrs. Rich into a better climate, as the fever she had been attacked with at Bagdad still hung about her ; and her being surprised by the heats here might have been attended with very bad consequences to her health. The Volunteer, from the goodness of the ship, and the kindness of Captain and Mrs. Waterman, afforded an occasion that was

* Or $\frac{7}{2}$ N. W. wind, which generally blows down the Persian Gulf for forty days, from the beginning of June to the end of July.—ED.

not to be neglected under these circumstances—and we therefore consented to a separation, necessary, but extremely painful to us both. Dr. Bell had the goodness to accompany her.

At night on the 26th the weather was rather calm, and I remarked a curious phenomenon. My bed stood on an open terrace, and lay nearly east and west. The north side of it was completely wetted with dew to about half the breadth of the bed, as if water had been poured on it, while the southern side remained dry. There were two pillows, the one on the north side was quite wet, that on the south was dry. In bringing my barometer from Bussora, a considerable quantity of the mercury escaped, so that I cannot make any barometrical observations here, which I should very much wish to do.

July 1st.—A salute from a vessel belonging to the governor of the town announced the feast of the Beiram, which is not celebrated with much splendour here. In my walk this evening I observed the boys playing at a game exactly resembling one I had seen played by boys in England.

The thermometer was yesterday 93°, the wind was S.W., and the day was prodigiously oppressive. To-day the thermometer is 96°, with what the sailors call a stiff N.W. wind, and the air is light and pleasant. They say the N.W. wind always raises the thermometer, but renders the climate more agreeable. It is a drying wind, but not so heated as at Bagdad. During calms or southerly airs the

atmosphere is charged with damp, and is exceedingly heavy and enervating. People observe that the winds in the gulf have altered considerably of late. Last year they had steady gales from the S.W., from which quarter formerly never anything more than a squall was known to blow.

July 4th.—For the last four days we have had a very heavy gale blowing without intermission from the N.W., and the air has been charged with a quantity of very fine dust, which seems of a sharp quality, and greatly torments the eyes. Sore eyes and blindness are very common here—I think much more so than in any place I have yet visited. You scarcely meet a person who has not some defect in his eyes. Many of the Bushire people are tall, but they are not in general either muscular or good-looking.

July 10th.—This morning the Conde del Pardo and the Malabar came in—the former from Bombay, the latter from Bahrein, having lost a great many men by a fever caught at that place, supposed to be the plague, which rages at many places on both sides the coast. The Governor of Bushire is taking precautions to prevent its reaching this place. He will allow of no communication to be held with the Malabar—the captain in vain attempted to land. The crew is said to be very sickly, and in great want of everything.

July 11th.—Dr. Dow and Messrs. Taylor and Sturmey went astern of the Malabar to-day, by per-

mission of the governor of the town, to see what could be done for her. Dr. Dow reports the sickness to be the cholera morbus, and not the plague. She has lost sixteen of her crew, but the complaint does not seem to exist at present among the survivors.

July 12th.—The Malabar sailed for Bussora. The governor here now says he will allow of no communication to take place between his town and Bussora, because of the indiscriminate intercourse there allowed.

July 14th.—I have observed that when there is a breeze it begins in the morning at N.W., and comes round gradually; at noon it is W., by four o'clock S.W., at sunset S. It then dies away, and the first part of the night is calm. About two or three in the morning it is S.E., varying to E.; with the dawn it grows calm again till about nine A.M.

On timing a number of guns fired by ships at anchor in the inner roads, I find that the sound reaches us at the factory in fifteen seconds after the gun is fired. The sound comes before the wind. This will give 2770·9 fathoms for the distance of the ship: or, allowing three fathoms a second for the wind, 2816. The ship, the *Rahmania*, is lying just within the entrance of the inner road, and bears N. 23 W. from the new factory*.

* I have timed this more than twenty times, and find it always gives the same (15") under every circumstance of calm, or wind perpendicular to the course, so that no allowance for the wind is necessary.

July 17th.—The Salekh, a ship belonging to the Imaum of Muscat, came in last night. The governor will not allow her to enter the inner roads. They have, or at least have had, the cholera morbus at Muscat.

The weather is now quite intolerable: though the real heat is nothing compared with what I have seen at Bagdad, yet there is a steam and heaviness in the air exactly like a Turkish bath, which makes breathing a labour, and keeps the body in a profuse perspiration, covering it with the most dreadful prickly heat I ever saw. My poor *Bagdadees* are greatly distressed. Though the thermometer is lower than it was, yet the heat is more oppressive in proportion to the humidity contained in the atmosphere. Thus it is likewise that the heat of Bussora is less in degree, but more oppressive and relaxing, than that of Bagdad—and by the same rule that of Bushire than Bussora. The sea is warmer than new milk, and so relaxing, that Dr. Wilson, an expert swimmer, tells me he finds great difficulty in swimming in it. The sea-breeze is heavy, moist, and unrefreshing; though it is better than the dreadful calms with which the gulf is commonly afflicted at this season of the year. The thermometer continues the same from nine at night till three in the morning, and from one P.M. till six; the whole range is never more than 10° .

July 21st.—The temperature of the sea this morning at dawn was 90° ; of the air at the same

time 88°. The famous Shirauz cats when brought to Bushire soon lose the long furry coat which is the characteristic of their breed, and become like common cats. The natives say this proceeds from their eating fish; but I think, however, that it is rather the effect of the heat.

July 22nd.—I had a visit to-day from a man of ninety years old, who says he recollects the English factory at Gombroon, Nadir Shah, &c. He enjoys a small pension from the Company, procured him by Gen. Malcolm, to take care of the British flag.

The population of Bushire is said to be about ten thousand souls. A considerable portion of the houses are mere mat and reed hovels, no better than those of the Albu Mohammed Arabs*. In the summer the richer inhabitants build Tchardaks, or booths, to live in, on the roofs of their houses, for coolness.

The kind of boat or coasting-vessel called in India a Trankey, is here called a Bateel, which in all likelihood comes from the Portuguese.

July 23rd.—The heat has become intolerable, and I find I must quit Bushire, where I have indeed already remained longer than in prudence I ought to have done, for I find myself again declining in health. Accordingly, I have resolved on a visit to Shirauz, and Dr. Tod and Mr. Sturmeý propose accompanying me. We were to have started to-day, but the Company's cruiser, the Teignmouth, arrived

* A very poor tribe of Arabs, who live among the low brush-wood on the banks of the Tigris, between Bagdad and Bussora.—ED.

this afternoon, with important dispatches, which will detain me for this night.

July 24th.—At nine o'clock at night we left Bushire. I felt very poorly, but it was essential to get out of the heat as quickly as possible. After crossing a morassy tract of ground, which at spring-tides is partly covered by the sea, but was now only moist in some places, with large patches of salt, at half-past twelve we halted for an hour to take coffee. As day broke we found ourselves steering towards the high mountains, over a sandy level country, sprinkled with caper bushes and tamarisks, with here and there scanty traces of cultivation, and some patches of date-trees. After crossing the dry bed of a torrent, at half-past five in the morning of the 25th we reached Tchahkoota, a pretty large village of mud huts, with a mud enclosure at one end, dignified with the appellation of the Castle, under the gateway of which we were lodged, quite in public. Some date orchards and gardens were scattered about. The people looked like *Gooran** Arabs, if I may be allowed the expression.

July 25th.—A true burning saum, or hot wind,

* See Residence in Koordistan, vol. 1. p. 80.

† The intense heat of the wind at Tchahkoota is remarkable, as showing how small a space of hot country is sufficient to dry and heat the wind. The wind was W., consequently came directly from the sea, from which we could not be further distant than eight or ten miles—yet it had acquired every quality of a true saum. The thermometer was 110° in the coolest place we could find, yet I found this less oppressive than the moist heat of Bushire.

which seemed quite to invigorate my *Bagdadees*. Tchahkoota, which means shallow well, can turn out upon necessity about 800 musketeers. The people are Sunnis, of the Maleki and Shafei sects.

We left Tchahkoota at half-past eight in the evening, and proceeded in a northerly direction, over broken ground, which was sometimes rocky, and sometimes deep sand, and over which were sprinkled many large bushes, affording, we were told, shelter to hares and antelopes. The night was extremely hot, and the ground seemed to send up quite a reflection of heat.

We stopped about fifty minutes for refreshments, and at two o'clock in the morning we arrived at Burauzgoon, passing first along gardens and plantations of date-trees, tobacco, &c., for about two miles. We went to the new caravanserai, which is not yet finished, but affords tolerable accommodation under the gateway. I was much flagged and exhausted by the heat of the weather, and I had besides the luxury of a stumbling mule. I dislike night-marches very much; they completely reverse all one's habits.

July 26th.—Selim Aga, the governor of Burauzgoon, sent us a present of a very fine mountain goat, the *chord* of whose horns measured about two feet—the colour was like that of the antelope, but the flesh tasted more like beef than antelope. We were attended here by a Gebr, or fire-worshipper, whose

brother has turned Armenian, and resides at Bushire. The Armenians seem to have hopes of the conversion of this brother also.

The proper name of Burauzgoon is Barazjan. It is a very considerable place, though built chiefly of mud, with a bazar resembling that of Sulimania. There are 32 families of Jews here. The people of the place are all Shiyyahs, and speak a dialect even more difficult to understand than that of Bushire. In the afternoon I sauntered out a little to look at the country. Burauzgoon is about three miles from the hills, which look very bare. The neighbourhood of the town is very naked and stony, sprinkled over with bushes, among which was a very large kind of milk-wort: hares and antelopes likewise abound. The hills before us are celebrated for a profusion of medicinal herbs, as well as partridges and wild goats.

The governor insisted on sending a man with us to take a few riflemen at a post on the road, as the vicinity of Daulekee happens to be unsafe at this moment. We marched at half-past seven in the evening, and approached the hills very gradually over a more stony road, indented and worn with torrents, than we had hitherto met with. At about half way we came to a Rahdari, or guard-house, round which was a considerable village, and here we took out our guard, who had only matchlocks.

As we approached the hills our noses informed us we were in the vicinity of sulphur and naphtha.

Our guard here took leave of us, cracking off their matchlocks, and shortly after we passed the little stream near the hills, into which several sources of naphtha discharge themselves. The sulphureous and bituminous smell was intolerable. We then *rounded* a promontory in the hills, and after having passed over the naphtha water, we arrived at Daulekee at one o'clock. We had halted half an hour at the guard-house, so that our whole march was about four hours and a half. We put up at the caravanserai, which was a very tolerable building, but so singularly situated as to have the sun on all parts of it most of the day. The night was dreadfully close and fatiguing, and by the time we reached Daulekee I was quite exhausted. The air was very calm, and there were a few clouds, which rendered it much closer.

July 27th.—A terrible burning day; and the reflection from the sandstone hills behind the town greatly increased our suffering. Some fresh dates were brought to us, but they were very far inferior to those of Bagdad.

There was an earthquake last year at Daulekee, which destroyed most of the houses, and part of the caravanserai, and killed five or six people.

At half-past six we left Daulekee. There is a very extensive wood of date-trees which reaches from the town to the hills, and at a distance on the W. is a prodigious mass of date-trees, extending all along the horizon, looking quite like a forest.

I do not think I ever saw such a collection of them, except perhaps the first general view of them among the gardens of Bagdad. Among these trees we saw the naphtha water meandering to find its way to the Shapour river. After travelling about a mile along the foot of the hills, we entered them, and at this place we had a fine view of Daulekee. We crossed the first line by a pretty good road, which was by no means precipitous in any part of it—and we then reached the Shapour river, after winding through a narrow defile. We continued along the banks of the river, which roared among the rocks, for some time along a road which, being on the side of the hills, was occasionally precipitous on one hand, but by no means bad. At half-past nine we reached the bridge over the Shapour river, which is of thirteen arches, and in very fine order. After having passed it, we halted to take our cup of coffee, and to allow the baggage to get well on before us, so as not to embarrass us in the pass we were coming to. The Shapour river must sometimes be a very formidable river, though at present there is not above two feet water in it. Its bridge and murmuring put me much in mind of the Elwand at Khanakeen. The hills are all very bare ; scarcely a bush is to be seen. The water of the river was saltish, nitrous, and soft, and in the close defiles it was very hot. After a halt of three quarters of an hour we mounted again, and wound through the narrow passes, having the river on our right hand. At one place there was a

bad precipice, but not of long continuance, nor was the road very narrow, but it obliged me to dismount for a few minutes. The hills grew more ruinous as we advanced; large masses of stone almost blocked up the narrow winding passes. The people said it was the effect of earthquakes, but the whole range of hills seem to be in a state of decomposition. We soon after lost sight of the river and began to ascend the Kutal i Meloo, which is steep, and zigzags up the face of the rock, being much encumbered with fragments of rock and fallen stones, but by no means so bad as I had been taught to expect. Indeed the whole of the road would in Koordistan have been deemed very tolerable.

At the top of the pass was a guard-house, through the gate of which the road passes. The commandant asked us for a bakshish, but in a very humble manner, and by no means as a right. Some summits of mountains appeared higher than the top of the pass, but I do not believe any part of this range is above 1000 feet high; I should say not above 800 feet*.

We now immediately entered on the plain of Konar Takhta, and in about three miles' march from the top of the pass, along a fine level road, we reached the village and caravanserai of Konar Takhta. The latter was not so large as the one at Daulekee, but possessed the advantage of a Balak-

* They appear to me like the Rabban Hormuzd hills.

honeh or balcony, a place over the gate, and a Zeer Zemeen or cellar under ground, for the hot weather. We felt a very agreeable difference in the air here, which was light and cool, and I had a comfortable sleep in the balakhoneh. We arrived at half-past one, the march having occupied about six hours.

July 28th.—The Plain of Konar, which is in the district of Khisht, seems about five or six miles over, and nine or ten long from N.W. to S.E., enclosed by hills, behind which on the E. appears a still higher range. On the N.W. is a large plantation of date-trees, and the jungle round to the W. is very considerable. The village itself is a miserable place. In the caravanserai we found some travelling tinkers, repairing and furbishing old arms, and mending stocks of matchlocks.

We mounted at half-past six in the evening, and passed a little group of huts, belonging to Eliauts, of the tribe of Kureiees, a branch of the Mamasenni Koords. One hour's march brought us to the hills which bound the plain of Khisht to the eastward. We crossed them, and reached the valley of the Shapour river, on the banks of which we halted at half-past eight; it flowed N.W.; we were on its left bank. This cannot be the same river we passed below at the bridge, unless it flows under ground at some part of its course, and we have gone over it. But I have no doubt *this* is the Shapour river, both from its position and the information of the guides, who said it came from Shapour and Nakshi Rustam,

the name by which the sculptures are known. The valley is narrow and rocky, and the river rapid. I tasted the water, which was good, though warm, and unlike that at the bridge. There were many rhododendrons in flower, which gave forth a pleasant odour. We soon lost the Shapour river on our left, and turned right, into a rocky glen, hollowed out by a small rivulet, which had, however, caused mighty havoc, and was to give us great trouble; its water was brackish, and I think naphthous, and it leaves patches of nitre on the banks.

As we advanced the glen grew wider—the strata of sandstone in several places dipped west, and had been washed quite bare; two or three layers together sticking up above the soil like gigantic walls half overthrown; fragments of stones encumbered the glen, which gradually became almost a ravine; and huge cliffs seemed to overhang the path on both sides: the wildness of the scene was, I have no doubt, much increased by night. I observe that these roads, unlike those of Turkey and Koordistan, keep to the bottom of the ravine as much as possible; the glen wound among the cliffs, which almost shut out the sky, and, gradually ascending, we at least reached the foot of the Kutal i Kemarij. It began well, but we soon found the little stream had cut down the side of it on our right hand, leaving a frightful chasm between it and the next cliff, which seemed perpendicular; the very bad precipices, however, were not of long duration: the

worst is called the Kemer* i Azar Khani, where we had certainly a fearful glimpse of the dark gulf, which possibly looked more formidable by the uncertain light. The ascent was not so steep as the Meloo: near the top the ledge of the road is actually separated from the cliff by a rent, and the crack reaches across the road to its outer edge: the whole fragment will one day fall in tremendous ruin. After reaching the summit, we descended a little to the Caravanserai of Kemarij, which stands alone among some low hills at the entrance of a small plain, surrounded by rocks. It was deserted, and appeared to be seldom the resort of travellers now; indeed it could never have been a good one. Nevertheless the night was so delightfully cool that we had comfortable rest. We arrived at half-past eleven, the march being four hours.

July 29th.—We were obliged to send to a village about half an hour off, for our supplies, and our muleteers procured us a load of snow, which was coming from Kauzeroon. We got also some pretty good fresh figs, and some indifferent melons.

We mounted at six, and proceeded at a good round pace through the valley of Kemarij. I observed a path along the rocks on our right hand, which leads to Kauzeroon by a shorter but more difficult cut, only used in troublesome times, or by foot messengers.

As we proceeded through the valley I remarked

* Kemer means a narrow ledge over a precipice.

caper-bushes in great quantities, broom on the rocks, the large milk-wort before mentioned, and some small trees. At the end of an hour we entered the defile of Tenj i Turkoon ; at the entrance is a neat square tower with a small guard, the pass being occasionally rendered dangerous by the incursions of the Mamasenni Koords. We met some few families of them transporting their effects on cows, which is almost a characteristic of Koords. The pass is a narrow winding ravine encumbered by loose ruinous-looking stones. It is only a few yards wide, and the rocks and earth rise from each side, and are studded with a few bushes, among which I noticed the broom. In Koordistan the ravine would have been the bed of a little stream instead of the road, which would have led along one of the sides of the cliff, but the scarcity of water in Persia enables them to avoid precipitous roads. After winding about an hour, mostly on the descent, the pass began to widen, and we had the Shapour river on our left. At twenty minutes past eight we arrived at a guard-house, where we alighted to take coffee. The guards were very civil, but terrible beggars as usual. I have ascertained a point I much wished to know : the river of the bridge near Daulekee is not the Shapour river, but comes from Pamar, seven farsakhs from Kauzeroon. The Shapour river is the one we saw near Khisht, and is excellent water throughout its course. We drank some at the guard-house here, which is close by the river, and

found it very good. I obtained this little scrap of information after enduring a horrible quantity of prosing, generally from two or three Persians at once.

We mounted again at nine, and descended by a gentle slope into the valley of Kauzeroon, leaving the Shapour river on the left. Shapour is one farsakh from the guard-house, but over a very bad road. The valley or plain of Kauzeroon is not so wide as that of Sulimania, but is, like it, enclosed between two parallel long hills. The plain has formerly been well cultivated, and there are remains of many water-courses, some of which have left very ugly holes in the very centre of the road, which must be very dangerous in dark nights. One hour from the guard-house we passed the ruined village of Dirriz, at which place the road from Kauzeroon to Shapour branches off, which is about two farsakhs off. I propose, however, to defer my visit to that place till we have cooler weather.

At twenty minutes past twelve we arrived at Kauzeroon, or rather at the garden where we proposed to lodge, near it. Although all this had been long ago previously arranged, we found on our arrival the usual scene awaiting us, of every one talking and no one listening, and we found that the baggage had been all taken to the Khan's house in town, where it was proposed to lodge us; and all our remonstrances only produced increased noise; no one seemed inclined to take any steps about it. At

last, when they found we were resolute in keeping our station at the garden, they condescended after incessant talking to go after our baggage, part of which was brought to us about two o'clock in the morning, when we got to bed. The Persians are the most noisy, immoveable, and dilatory people I ever met with.

Kauzeroon is under the east line of hills, and has been a large town, but is now ruinous and desolate, and, with the exception of the governor's house, is a very dismal-looking place. The ramparts were destroyed by Jaafer Khan Zend, the governor of Shirauz, on account of rebellion. The population is said to be about 10,000 souls.

July 30th.—It was nine o'clock this morning before we could procure the remainder of our baggage from the town, and we experienced the same dilatoriness and terrible talking we had been subjected to last night before we could obtain any of our supplies. We here lose the turban, and the black cap commences. We have still the date-tree, that harbinger of heat. Kauzeroon pays to government 20,000 tomauns annually. The staple produce is tobacco, and the so-much-esteemed Shirauz tobacco grows in this district. The inhabitants are reckoned hospitable to strangers. They speak a very curious dialect, which contains many words of old Persian. There is a famous Zor Khaneh or wrestling-house here, and most of the inhabitants of the town are Pehlivans, or wrestlers. This is the burial place

of the Shahzadeh Hamza, the son of Imaum Mousa,* who was defeated and killed here in an insurrection against the Caliph.

Our muleteers, being all Kauzeroon men, were very loth to start; and, what was still more extraordinary, they wanted to make me pay for their staying. However, neither staying nor paying suited my views, and so with a great deal of trouble we got them off at seven. We skirted the ruins of Kauzeroon, which are very considerable, and kept near the hills, passing many water-channels and extensive ruins of villages. We had an alarm of thieves, and one of our guides saw the light of a matchlock in the distance, which made us keep near the baggage for its protection. Two hour's slow march brought us to a causeway of about 400 yards, over a very wet morass, which was full of shrubs, and seemed to extend far on the right and in front, where it terminated in a lake. At the end of the causeway the cliffs retiring formed a sharp, high, rocky promontory and a bay, the area of which ascends gradually over a stony road, to the foot of the so-much-talked-of Kutal i Aushanek, 'also called the Dokhtar. Arrived at the foot of the rock, the road seemed to terminate: the black cliff, which had before appeared not so formidable, now hung perpendicularly beetling over our heads, and seemed to bar all further progress. Dante's rock of Purgatory

* The seventh Imaum of the family of Ali, supposed to have been poisoned by the Caliph Haroun Al Rashid in the year 183 of the Hejira.—ED.

came forcibly to my recollection. The road begins, however, to ascend the face of this cliff, which is diversified with projecting fragments of rock and trees often overshadowing the road. We soon came to the place where the road is wholly artificial, being built up with buttresses, and paved and broad enough for three or four mules or a carriage, the levels and turns being as well managed as they could possibly be, considering the perpendicular and narrow space they are allowed. It is so managed as to give no alarm to the most timid traveller. I never saw such a work in any part of the East.* This Simplon of Persia seemed to afford some fine views, and I purpose to myself much pleasure from inspecting it by daylight, on my return from Shirauz. At the top we crossed over to the east face of the ridge, along which we proceeded, among bushes and dwarf oak-trees, to a plateau, from whence we descended a few hundred paces to a guard-house. We arrived at half-past eleven, and stopped here about an hour to refresh ourselves and our animals; when, again mounting, we continued to descend by an excellent road into the valley of Desht i Ber, which, as well as I could judge by the light of night, seemed well wooded. It is said to be much infested with lions, as is all the country hereabouts as far as Khoneh i Zengoon. After having passed through the valley at a good round pace, we began to ascend again

* This fine road of the Dokhtar has been thoroughly repaired by Kelb Ali Khan, the present Governor of Kauzeroon, and looks quite new.

another ridge by a very stony road, which was carried up the slope of the mountain without much winding or any precipices.

We met a caravan of Arab pilgrims from the East or Shiyyah Coast of the Persian Gulf, returning from Meshid.*

The mountains were wooded with dwarf oaks and with broom from ten to twelve feet high. The night air was so sharp as to make us long anxiously *to be housed*. However, we no sooner reached the top of the ascent than another summit rose beyond it. At last, continuing to ascend, we reached the caravanserai at three in the morning. It is situated under a high summit, and is kept by a soldier. We found an oak fire burning in the centre of the open room or divan, where we took up our quarters. On entering the caravanserai an old mule was produced, and the guard said, "This is dedicated to Kerbela, and it is a suab, or a holy deed, for every muleteer to give it a handful of barley." This caravanserai is

* Meshid, which in Arabic means the place where a martyr is buried, is a place of pilgrimage in Khorassan to the tomb of Imaum Reza, who was the eighth Imaum of the family of Ali, and was named Reza, or him in whom God delights, by Al Mamoun, the Caliph of Bagdad, who declared him his successor, in hopes by that means of putting an end to the disturbances in the provinces caused by the friends of the family of Ali. The Caliph was, however, not only disappointed in his hopes, but had to encounter resistance in his own family; and, had not Imaum Reza died, it is suspected by poison, Al Mamoun was in danger of being driven from the throne himself. Imaum Reza is supposed to have been among the founders of that body of mystics called in Persia the Sooffees. He died in the year of the Hejira 203, of the Christian era 818.—ED.

called Peer i Zen, and the pass before us Kutal Peri i Zen, many parts of which are fine; and they say that the sea is discoverable from the summits above us. We had fortunately brought our supplies with us from Kauzeroon, for nothing whatever was to be had here.

July 31st.—The weather delightfully cool. We find that the peak from which the sea is to be seen is not the one behind the caravanserai, but one much higher, which is yet some way off. We marched at ten minutes past six, continuing the ascent without interruption, which now became steeper but not precipitous, nor did the road wind much. There were some fine hawthorn and oak-trees, and a little above the caravanserai a fine spring of water running across the road. At eight we were nearly at the summit, and had a fine view of the country we had left and of the Lake Perishoon. The whole ascent of the Peri i Zen from the bottom occupies three hours, and is prettily wooded. Many much higher summits appeared around us, especially one to the left of the road, which is, I believe, the same from which the sea may be seen. We now continued pretty level for a short time between the two summits, among woods of very large hawthorn-trees, and oaks of the small-leaved kind. I noticed in one place that a kind of wall of rock had been completely cut down into a narrow gap or passage, evidently by a torrent. There had most likely been a lake between these two summits, which had in this

manner emptied itself down the precipice that the wall of rock had defended.

We now began to descend by a pretty steep road, rendered troublesome by loose stones, but still among woods, which gave out a most fragrant odour: a pleasant brook murmured on our left, and before us the plain of Desht i Arjoon was rendered cheerful by numerous fires of the Eliauts. One end of this plain was occupied by a lake and a very extensive morass, famous for wild hogs, one of which trotted very deliberately across our path; and we heard a great shouting all around, which we were told proceeded from the Eliauts to frighten away the hogs. Francolins are said to abound hereabouts, and there are many lions, which the natives maintain are quite harmless, through the blessing of Ali. The Eliauts at the morassy end of the plain are Arabs of the Maddeni tribe; and the Persians call them Gameshi, from their principal wealth consisting in buffaloes, of which they have prodigious numbers.

We halted at nine to take coffee. The cold was so intense as to be very disagreeable, yet we were much troubled with large venomous musquitoes. After resting about half an hour, we proceeded at a rapid pace along a fine level road over a verdant country, with the hills close on our left, and arrived at the village of Desht i Arjoon at eleven; the actual march having been four hours and fifteen minutes, though the stage is called three farsakhs. Just before coming to the village we crossed some pretty

brooks among trees, which spot I propose to visit to-morrow. We were lodged in a private house, and found a warm room very agreeable.

August 1st.—The plain is beautifully verdant. We walked to the springs we saw last night, which are about a quarter of a mile off. One fine spring bursts from the rock, and at once becomes a considerable stream, assisted by some subordinate ones which spring from the ground and rocks close by, and even from the root of a tree. A wild fig-tree covers the principal spring. The water is like liquid crystal, and flows through a beautiful grove of fine plane and willow-trees. It is a lovely spot, and is dedicated to Ali. They show a slab on which four holes are said to have been made by the feet of Ali's horse, who was brought here by a miracle, and killed a lion. The temperature of the spring was 58° ; that of the air at the same time, in the shade, at half-past ten A.M., was 73° .

The cliffs above have partly been shaped by art, and some caves hollowed out, where the rock is seen to be very fine white marble. In one of these caves was a mat, and a lamp burning, as it was reckoned a holy place. There were two inscriptions, one in Cufic and the other in Persian; but they were almost obliterated. This spot is a favourite resort of the Ali Ullahees,* especially the Nanakeli Koords, of whom

* The same sect as is known in Turkey by the name of Tchiragh Sonderens, or extinguishers of the light; of whose opinions little or nothing is known.—ED.

there are many hereabouts, who are principally of that sect. Desht Arjoon, or more properly Desht i Arjen, or the Plain of the Birch, is left principally to the Eliauts, but might be very highly cultivated. We saw large droves of very fine cattle scattered about, and procured some delicious butter at the village, which is the only one in the plain. On our return, Dr. Tod tried the temperature of boiling water, and found it to be $197\frac{1}{2}^{\circ}$.

We mounted at half-past five in the afternoon, and proceeded diagonally across the head of the plain, having the hills which close it on the north on our left hand. We now began again a very gentle ascent, and had a fine view of the plain, which has all the appearance of having been once a lake. On the hills above us we observed many fine-looking vineyards. We continued winding among the hills, which were covered with trees and bushes, wild cherry-trees, pears, hawthorn, and many others which I did not recognise: the ride was quite beautiful. Flocks of red-legged partridges crossed our road, and scarcely deranged themselves on our approach. We saw one hare, and the people told us that there were many lions in this neighbourhood. My mule was very startlish the whole evening. We descended by a long, but good road, into the valley of the Karaghatch, a stream which comes from the north and runs towards Firouzabad, as our guide told us. It must occasionally be a very considerable

torrent. In every glen we perceived the fires of the Eliauts.

The planet Venus looked most beautiful in the clear, pearly sky of the west, and the moon just above it shone with a peculiar silvery light. We halted a little after seven, and received a visit from two very civil and intelligent men from one of the neighbouring encampments. They told us they were Nanakeli Koords of the Lak Nation; that the principal part of their tribe, of about 1000 tents, was encamped for the summer in these valleys; and that their chief resided at the court of the Prince of Shirauz. In the winter they go towards a warmer country. It is only two years since the *bulk* of the tribe came from Teheraun, where it formerly was, and the change is not agreeable to them. They say the pasturage does not agree with their sheep, which die very fast here. They were acquainted with *our* Koordistan, and said some of their tribe were there. I could understand their Koordish perfectly, though it was a little different from that of the Bebbehs. They invited us to their tents, and promised us an excellent supper of stuffed lamb.

We mounted again at twenty minutes past eight, and, after proceeding a little way in the valley of the Karaghatch, we forded it at a place where it divides into three streams.

We now ascended into a little higher ground, in an easterly direction, and continued still among

woods along an excellent road, going as fast as the mules could amble; and at ten minutes before ten we arrived at the miserable village Khoneh Zengoon; on entering which we crossed another stream. We put up in the caravanserai, which was a very dirty one, but rendered less disagreeable by the sharpness of the night air. The march had been three hours and thirty minutes, called three farsakhs.

August 2nd.—We had some milk and butter here, which were nearly equal to those of England. At ten minutes past five we mounted, and, keeping the Karaghatch river close on our right, proceeded over a country consisting of open downs covered with bushes only (the wood having now disappeared), affording excellent cover for game, which is in prodigious abundance: the partridges crossed our road in flocks. The country was diversified into hill and dale, but we were very visibly on the descent during the greater part of the way. At ten minutes past eight we halted to wait for the baggage, which the rapidity of our progress had thrown far in the rear; and at twenty-five minutes to ten we again mounted, and descended over a worse road than that we had hitherto pursued. After crossing a little stream we soon came to a more considerable one, which we forded at the ruins of a bridge. The guide remarked that all the waters hereabouts had of late considerably decreased. We kept the valley of the stream on our left, the road being rather rocky and precipitous; and in half an hour's march we came to the Rahdar

i Tchinar, a bridge over the river, where there is a guard, or rather custom-house. The pass is rendered narrow by the hills and the river, so that nothing can escape it ; and through this pass is the entrance into the plain of Shirauz, from whence it is distant about eight miles. We arrived at the Rahdar at twenty-five minutes past eleven, and halted till midnight, when we mounted again, and proceeded with great rapidity along a fine level road till we reached the neighbourhood of Shirauz, and, passing by some gardens, we arrived at the one destined for our reception at ten minutes before two in the morning. It was called the Jehan Numa. We found here my old acquaintance Major Litchfield, who received us most hospitably.

Our last march is called four farsakhs to where we first halted ; two to the Rahdar, and two to Shirauz ; it is nearly thirty miles. We were six hours and forty minutes doing it, going generally very rapidly ; that is, as hard as the mules could amble.

The Jehan Numa is close to the Hafizia, and almost at the entrance of the pass of Tenj Allah Akbar. It is a square enclosure of about two hundred yards each side, the area being laid out in two cross alleys, or four walks, bordered with cypress-trees ; and in the centre is a Koola Frenghi, or small building like a polygonal tower, in the middle of which is a cross hall and fountain, the upper corners being formed by small rooms. A small canal of water, occasionally set in motion, trickles down the

centre of the principal alley, and is received by a tank or reservoir at the gate, over which is a balakhoneh or elevated open hall ; but all is now in rather a tattered, tarnished condition. Advantage has been taken of the declivity of the ground to form a subordinate garden in front of the great one, sunk below it about twelve feet. Between them is a fine terrace, in the Italian taste, which would look very well were it finished with a balustrade.

The garden of the Hafizia is about one hundred yards from the terrace of the Jehan Numa, on the left hand, looking to Shirauz. It is small, and divided into two enclosures, one a little lower than the other, by the building or summer-house, which consists of a hall open on both sides, and some small rooms. The upper division is a burying-ground, and in the centre is the tomb of Hafiz covered with a fine slab of Tabreez marble, as it is called, with an ode of the poet's cut on it, which was executed by command of Kerim Khan. The lower division, which faces Shirauz is a pretty little wild garden, with a few cypresses and poplars in it. The Hafizia had been assigned by the Prince of Shirauz for our accommodation : but, as the Koola Frenghi in Major Litchfield's garden was vacant, we preferred accepting his kind invitation and remaining with him.

Almost all the cypress-trees, for which Shirauz was once so celebrated, seem to have disappeared. The Jehan Numa has still its walks bordered with them ; though I do not think they are such fine trees

as those at Constantinople, and there are a few scattered about in different places ; but, with these exceptions, they may be said to have been destroyed. They are frequently cut up for common carpentry, door and window-frames, as one of the Persian attendants told me. Indeed the little wood there is in Persia they say is fast disappearing.

The Prince of Shirauz is now repairing his garden-house adjoining to the Jehan Numa, and for wood-work he has cut down some very fine plane-trees planted by Kerim Khan in the Bagh i Vakeel, which is in the city. My informant, though a servant of the Prince's, spoke of this with evident regret, as also of the destruction of Kerim Khan's Hall of Audience, for the sake of the stones, porphyry pillars, &c. The Kajars have not built anything like it.

It is surprising how the memory of Kerim Khan is still revered at Shirauz. There certainly must have been *something* in the man who could so long secure the grateful recollection even of Persians.

Provisions in abundance were brought to us, consisting of very fine mutton, excellent bread, vegetables of different kinds—and among them nolecole and badinjans ; some of the best nectarines I ever tasted *out of England* ; pears, apples, and indifferent plums ; almonds, and large black mulberries. Peaches are just coming in, and promise to be good. Grapes are not yet in, nor are the pistachios and walnuts yet ripe. The best grapes are called Rish i

Baba, and are white, small, and oblong, very luscious, but are said to want flavour, which, I understand, is the general fault of the grapes here.

August 6th.—Walked in the evening to the garden of the Haft Ten, or seven bodies, which is close to the garden we inhabit, adjoining the mountain, or rather, bare rock. We passed on our way the small garden and convent of dervishes of the Tchahal Ten, or forty bodies, which adjoins the Haft Ten. The latter is so called from containing the bodies of seven holy men, about whom the guardian of the place could tell us nothing more than that they were peculiarly venerated by the Nanakeli Koords. Many other graves were about theirs. The court or garden, which is small, is thickly set with old cypress-trees, among which we noticed one very fine old fir-tree. I have seen several others of the same kind, though of inferior size, in the neighbouring gardens, which proves that they succeed here.

The apartments consist of an open hall, supported by two fine stone pillars in front, which they have had the bad taste to daub over with paintings of flower-pieces. There are also some small side-rooms; but these quarters, though sometimes assigned to travellers, cannot be agreeable, from their closeness, and the funereal appearance of the court. The wind was blowing through the cypress-trees, and made a melancholy murmuring, like the distant noise of the sea on a sandy beach.

The walls of the talar or open hall were bedaubed

in fresco, and at each end was a portrait of Hafiz and Sadi, very coarsely done. That of Hafiz, however, has something of the character of the fine portrait of him in my possession, but the beard is long and white ; that of Sadi has only whiskers. They are not ancient, as I was informed by our guide, who said they were painted in Kerim Khan's time.

August 7th.—Went to see the Prince's new garden adjoining ours. This is his favourite retreat, and contains three kiosks, each accompanied by smaller rooms ; one ordinary one at the gate, a finer one in the centre, and the finest of all at the top of the garden, which slopes downwards. Before the upper hall is a tolerable large reservoir of water, which is conducted down the centre of the garden in a narrow stream studded with little jets-d'eau, and bordered with young plane and poplar-trees. The paintings in the kiosks are in bad taste and ill executed, and the gilding and ornaments are coarse and glaring. There is one ridiculous representation of the king in full court receiving an English ambassador, who is represented in a suppliant posture. The drawing and the costume are both quite ludicrous.

Those kind of *sand-spouts*, or whirlwinds, which are called in India, Devils, are very common in the plain of Shirauz, and often present a very curious appearance, when ten or twelve of them may be seen at once in different places, rising into the air like huge columns. They are generally seen commencing by rising out of the earth with violence, like a

burst of smoke from a volcano, and gradually extending themselves upwards. The people here say that they are not formed at night, or in the early morning, or evening.

August 11th.—At the end of our terrace they have just pitched a little tent and planted a flag as a rendezvous for those who wish to go on a pilgrimage to Meshid in Khorassan, for which place a caravan sets out in a day or two, and intends going and returning in two months.

August 12th.—By an experiment made this morning the walls of Shirauz are exactly an hour's ride round, at a moderate pace; that is, as nearly as possible, three and a half English miles. The walls are built of unburnt brick, except the towers at the gates, which are of burnt brick; but, being neatly built and kept in good order, they have not a bad effect from a distance. They are only intended for musketry, and have loop-holes near the top, besides the battlements, with places meant to fire down from upon the enemy when at the foot of the wall. The ditch is slight, and in many places new: it is cultivated. The area of the city is of an irregular form, full of houses built very close together, so that the population must be considerable for its size.

August 15th.—The fine climate of Shirauz had so much invigorated me and my people, and the weather had now become so much cooler, that I determined to avail myself of the bright moon which was shining, since we must still travel by night, to

set out on my intended visit to the ruins of Persepolis and Nakshi Rustum.

We accordingly left the Jehan Numa at half-past six in the evening, and proceeded to the pass of Tenj Allah Akbar, about half a mile distant. This pass, which is an opening in the first range of hills, is closed by a gateway, which was now under repair, and indeed rebuilt in a very good style at the expense of Zeki Khan, the present Vizir of Shirauz. A very large copy of the Koran, called the Haft-mun, is kept here; which is in the handwriting of Sultan Ibrahim, the son of Sharokh, the son of Tamerlane. It is to be deposited in a room above the new gateway, that all comers and goers may have the felicity of passing under it. The best view of Shirauz is from this spot.

After passing through a ravine closed by a ruined aqueduct we turned north, keeping the principal range of hills on our right; our road, however, winding much. A little above, the waters of the Rukneh, or Ruknabad, were brought from the left in some little channels contrived for irrigation, which were generally conducted along the sides of the hills that bounded our road on either hand.

Having, in the progress of our intricate, winding, though gradual ascent, reached the pass, we descended by a long and steep road to a guard-house called the Rahdar i Bajgah, where we arrived at nine, and halted for half an hour. The moon shone bright, and the night was quite delightful.

We now crossed a valley about two miles over, on each side of which were high mountains; and, after passing over a lower part of the mountains, we descended again between hills, and reached the plain of Zergoon, which was well cultivated with cotton and the castor-oil plant*. We arrived at Zergoon about half-past twelve, which is a long but narrow town, defended by a mud wall on the west side, and situated at the foot of a line of bare and shattered rock running nearly north-west and south-east, and covering the town on the east. The houses were all built of mud; but among them there seemed some good ones covered with a neat, thick reed-thatch, flat at the top, and terraced with a coating of mud.

August 16th.—We were entertained to-day by a Persian musician. I have been struck with the number of fine voices among the Persians. Several of them trill surprisingly well, at the full stretch of their voices; but they are so fond of this trill as to appear while they are singing constantly in an ague-fit.

We left Zergoon at a quarter past five in the afternoon, and proceeded for about half a mile in a north-westerly direction, keeping the rocks at the back of Zergoon on our right. We then turned north-east, into a very singular-looking plain, as level as the sea, except where in different parts ridges of rock rise from it and run along, generally in a north-

* Called in Persian, Kenatoo, or Beedingeer.

westerly direction, often terminating as they began. These rocks of marble, with *oxide* and weather stains, frequently perpendicular, especially the upper part, and shivered so as to look prismatic or columnar, produced a most singular effect. One of the lines of these rocks looked remarkably like an inhospitable rocky shore. This was the plain of Persepolis.

We proceeded at a rapid pace, and, as we passed along, we saw down some of the ramifications of the plain, made by the lines of rocks above mentioned, numerous encampments of Eliauts, who hereabouts, I was informed, are of the Turkish race.

At half-past six we came to the river Araxes, which we crossed by a bridge of two very high arches and three smaller ones. It is sometimes a deep and dangerous torrent, and even now the body of water is considerable, though confined in a narrow channel. It is sometimes called the Merdesht, and sometimes the Colvar-water, which are the names of the districts through which it passes, and at this season of the year it is drawn off for the cultivation of rice and cotton.

Just at the west end of the bridge commences a line of rocks, which runs up towards the north-west three or four miles and then terminates. Here we met some Eliauts, who called themselves Arabs, but had no appearance of it. We halted at the bridge until eight, when we mounted again, and proceeded very rapidly along the fine level plain of Merdesht; the latter part of which was intersected by water-

courses and cotton-fields; and I observed some barley which had just been reaped.

We were now approaching the spot, to visit which had almost from my childhood been the object of my wishes. Gradually the pointed summit under which Persepolis stands began to detach itself from the line of the mountains. A friend who was riding by me, and who was well acquainted with these interesting ruins, pointed and said, "Under that lie the ruins;" and at that moment the moon rose with uncommon beauty from behind it.

At ten we arrived at a garden constructed by Sheikh Ali Khan, a brother of Kerim Khan, all now in ruins; but there was a very good dwelling-place over the gate, and here we took up our abode for the night. The line of the platform was discernible, and I sat till midnight contemplating the spot.

August 17th.—I arose before the sun, and enjoyed the first view of the ruins, which lay due east from us, and at about the distance of a mile. I observed many villages scattered about, some of which were in ruins; and Eliauts of the Bazirri clans were encamped in various directions. The largest village was Kinara, from whence came several musicians and entertained us with the favourite ballad of Kior Oglou, which they performed very well. The people of this village are of the Turkish race, and speak that language. I asked one of them of what race the Bazirri clan was, and he answered that they were Persian Eliauts, and spoke *Taujik*—"Tau-

jik danisheiler Turkee bilmezler'')—meaning to say by this that it was *Persian* they spoke. Poor Bellino! how I thought of thee at this moment*!

We left the garden at twenty minutes to five, and directed our course to the prolongation of the Persepolis hills, which we afterwards skirted along on our right†. A little after five we came to Naksh i Regib, in a nook which one might pass a thousand times without perceiving. The front and two sides are sculptured, and still retain a beautiful polish. Some of the heads are manifestly Arsacian, the rest are all truly Sassanian. There are one Greek and two Sassanian inscriptions.

The rocks in which these sculptures are found soon terminate, forming the side of a pass or valley; on the opposite side of which lies Naksh i Rustom, under crags and mountains.

We pursued our way up the right side of the valley, and soon came to the remains of a city, or rather a square castle, composed of elevated mounds; the ditch was very perceptible, as well as the traces of towers all round. It is very evident that the river which runs through the valley must at one period have been divided into two branches, in order to fill the ditch. At present it runs only round the north

* Mr. Bellino (Mr. Rich's secretary), who had not long been dead (see Rich's Residence in Koordistan, vol. ii. p. 126), was much devoted to the study of Eastern languages, and this remark of the peasant tended to confirm some of his theories.—ED.

† I noticed a curious formation of bent strata of marble, as if the centre had been elevated before the mass had become quite solid.

end of this ruined town, near the centre of which I observed portals of very large stones, one column still standing, and remains of others scattered all about; besides which I remarked that there were ruins on the outside of the ditch; and, from the nature of the ground, it is difficult to say where they terminate.

A man with us, named Sari Bey, who was of the Turkish tribe called *Nefer*, told me that this was Istakhar, once the capital of the province of Fars. He said also that his tribesmen find quantities of copper arrow-heads all about among the hills.

Under the hills opposite this ruined town lay the village of Hagiabad.

We journeyed through the valley in a diagonal direction towards the east*, crossed the little river, and, about twenty minutes after seven, we halted to refresh, and to allow the baggage to get on. At a quarter past eight we mounted again; the wind was from the east, and rather warm, the night, too, being rather cloudy. After continuing for a little way in an easterly direction, we rounded the end of the Nakshi Rustum range of hills, and turned up to the north-west, and into a valley which runs into the larger one we had just quitted. If there had been a road over the mountain from above the village of Hagiabad, the distance would have been abridged by perhaps more than half.

We now crossed the river, which was in this place

* The valley runs south east.

a much more considerable stream ; which may be accounted for from its being drawn off below into many canals for irrigation. Keeping the river on our left, we proceeded up the rocky valley, which sometimes grows narrower and sometimes forms bays, with now and then insulated rocks. Some of the rocky and wild scenery was fine, lighted up as it was by the moon, which made the high, rocky hills above Nakshi Rustum appear even sublime.

At ten we ascended a rock, or promontory, to the village of Siwend, situated on the rock and under perpendicular cliffs, which must render it a very disagreeable abode in summer. In effect, we found the village abandoned, all its inhabitants being at their summer quarters down in the valley on the banks of the river, at a place they call the Baugh. To this, therefore, we proceeded, descending the promontory on the other side. In the vicinity of Siwend is found abundance of red-legged partridges, deer, and wild goats.

We arrived at the Baugh, which is a very large enclosed vineyard interspersed with poplar and fruit-trees, at about a quarter after eleven. In the latter part of the stage we had been detained nearly half an hour by the stupidity and chattering of the Persians. Our whole march, making allowances for stoppages, was about four hours and forty minutes.

I pitched my tent under the walls of a garden, and under the shade of a very fine willow.

The people hereabouts complain much of a fever

which prevails, and which they attribute to the grapes, as it always appears at this season ; but they say when it rains at the same time, which sometimes happens, the sickness is always greater. This village belongs to Aga Baba Khan of Shirauz ; and the peasantry, who speak a very curious dialect of Persian, complain much of grievous extortions ; but they attribute it all to the Kajar government.

August 18th.—We left the Baugh at a quarter after four, and forded the river, which we kept for some time on our right. A promontory advancing from the right of the valley seems as if it closed it up, but we found that the valley rounded it and took its usual south-easterly course again. I observed there was a great *tendency* to wood hereabouts, even in very rocky places ; and in the level places near the river there were some fine trees of willow, mountain ash, &c.

We again forded the river, which was here much deeper, and very full of high bulrushes*.

The village of Siwend originally stood hereabouts, but was ruined by the Afghans.

The valley or pass now expanded into the vale of Killalek, or Kilmun, on the left side of which were high and precipitous rocks of a black colour, at the foot of which gushed a little stream of very fine water.

* There is a road on the other bank which goes direct to Morghaub, distant about seven farsakhs.

We had with us a very curious fellow as a guide—a perfect original—he was, however, very intelligent, and better behaved than most Persians. He told me a number of amusing stories concerning the Divs*, Mader i Suleiman, Jemshid's Defter, &c. He likewise informed me that this river is called the Pervar, that it rises at Khoneh Kirgoon, one stage beyond Mader i Suleiman, flows by Morghaub, and Siwend or Baugh, by Nakshi Rustum, through the plain of Merdesht, and falls into the Bendameer. This latter river, he added, rises at Khosrooi Shireen, in Loristan, and at some seasons is entirely drawn off in cultivation; at others, the surplus forms a lake or salt pool, from which salt is collected, which he had seen himself. He had likewise been among the Baktiyaris. "These people, Sir," said he, "can't speak Persian, but speak Lori,—would you believe it? They call a man Mird,—and to say he is gone, they say Ruee."

At ten minutes before seven we halted near the ruins of a little fort, on an artificial mount, about the centre of the plain, where the village of Kilmun originally stood, which was likewise ruined by the Afghans.

In many parts of the plain I observed very considerable collections of barley, which was being trod

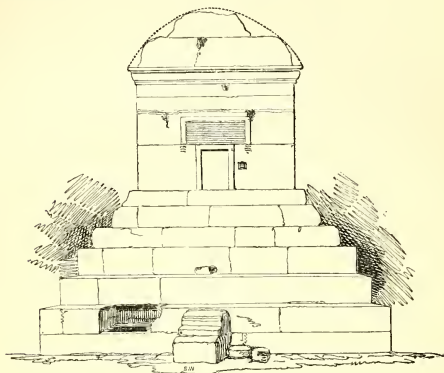
* The Mahometans believe that before the creation of Adam, this world was inhabited by creatures who were neither men, angels, nor devils, called by them Div—concerning whom they relate many marvellous histories.—ED.

out. About half-past seven we marched again, and at twenty minutes past nine we arrived at the miserable village of Killalek or Kilmun, round which were several well-looking gardens. The inhabitants at first made some difficulty about accommodating us.

August 19th.—We left Killalek at four. There are many gardens about it, and remains of *Kareezes* or water-courses, by which seemingly it must formerly have been a large place. Soon after leaving the village we entered a narrow rocky defile, through which we wound for some time. We put up a large flock of partridges, and soon after emerged into a fine undulating country, or plain interspersed with hills. The direction of our road was N. 20 W. As we descended a slope we saw the afternoon sun shining on the Mesjid Mader i Suleiman. I could perceive on the left some ruins and pillars under a little hill. This was what I was so anxiously in search of. Not far from us was a great encampment of Eliauts: they were Arabs of the Mezidi tribe—and they seemed to be very wealthy in immense droves of sheep, cattle, and camels. We forded the river, and observed where it goes off into a defile on the left,—and about half-past seven arrived at the Mesjid i Mader i Suleiman.

The very venerable appearance of this ruin instantly awed me. I found that I had had no right conception of it. I sat for near an hour on the steps, contemplating it until the moon rose on it,—

and I began to think that this in reality must be the tomb of the best, the most illustrious, and the most interesting of oriental sovereigns.



Mesjid i Mader i Suleiman.

I pitched my tent at a ruined caravanserai, at about two hundred yards N. 30 E. of the ruin*.

December 20th.—My eyes opened with the dawn on the celebrated ruin I had come so far to see. Before breakfast I went to visit the furthest ruins, which lie about N. 70 E. of the caravanserai. One column, which was not fluted, was standing erect, but without its capital; there were three pilasters, or immense pieces of stone hollowed out,—on two of them were inscriptions. Further south was another

* The village of Kalai Bulverdi N. 10 W., distant three miles. Morghaub about E., not visible from the caravanserai, said to be near two farsakhs distant.

and lower pilaster, seemingly unconnected with the others, upon which was the beautiful and curious figure so very accurately drawn by Sir Robert Ker Porter. It is a mythological figure with six wings; on its head is a pair of ram's horns supporting three cones like cypress-trees, above which is an inscription that is four times repeated.* There are the remains here of two lines of pilasters like a portico, all of white marble. The great extent of rubbish all about proves, I think, that there must have been a town here. I think I can trace four different sets of buildings, and the taste does not in any part seem Persepolitan.

I ascended the little hill above these ruins, called the Takht i Suleiman, built into a platform with large rough stones, faced with enormous blocks of white marble, cramped together with iron or lead, to search for which they have everywhere broken large holes at considerable trouble. The facing blocks are cut rustically, with raised centres, and smooth lower frames round them. I measured one, and found it to be fourteen feet two inches long, by three broad, but they are of different sizes. It is altogether a very grand work, and such as the natives believe could only have been accomplished by Divs.

I next went to a ruin a little to the north of the rest: it consisted of huge stones, without any inscriptions. I then returned to the caravanserai, which was

* See Plate 12.

built, according to an inscription on it, in the year 700 of the Hejira, I believe by a Khojah Bedruddeen; and the building of it must have caused great havoc among the antiquities, as it has been paved with large stones from the ruins. Some men, women, and camels passed us of the Shahseven* Turkish tribe: each man had a hawk on his fist. They said they were the Shahzadeh's falconers.

After breakfast I went to the most interesting of the ruins (the Mesjid i Maderi Suleiman).† It is a perfect sarcophagus, placed on a pyramid, all of white marble. The top is arched,‡ resting on a cornice. There is a little door, above which are the marks of a tablet in very correct taste, which may have contained the celebrated inscription. The whole is of enormous blocks of stone, cramped together, just like the Takht i Suleiman; and they have in like manner bored holes to get at the metal. The building is aligned N. 55 W. by S. 55 E. The little door is at the northern end, and is the only aperture. I can easily conceive how this building may have appeared to be one piece formerly. The inside is small and blackened with the smoke of lamps. The Mahom-

* Or King-loving.

† See Rich's Residence in Koordistan, vol. ii. p. 219.

‡ It is quite evident that the roof has been arched, and it is even clear how, by the two side pieces which remain above the first layer of the roof. The side pieces of the top are gone, only the centre one remains.

medans have been at the trouble of cutting an ornamented niche with an Arabic inscription in the south-west face. The artist entitles himself the Glory of Stone-cutters. There are many Arabic inscriptions made by visitors above the steps. One person has cut a buttress, pincher, hammer, and horse; another, a figure with a gun.

The pavement of the inside is two pieces of marble, and it is covered also with two pieces of marble; the pavement seems worn away as if by water; holes are broken into the walls to get at the cramps, of which two, nevertheless, are left; they are of iron, fastened with lead. This building has suffered more by violence than time. I observed many votive offerings. The dimensions are as follow:—

The inside of the sarcophagus:—

Length, 10 feet 10 inches.

Breadth, 6 feet $10\frac{1}{2}$ inches.

Height, 6 feet $10\frac{1}{2}$ inches.

The outside of the sarcophagus:—

Length, 20 feet 5 inches.

Breadth, 17 feet 2 inches.

Height, to the bottom of the cornice, 11 feet.

There are four layers of stone; the lowest is 7 feet 3 inches, the next smaller, the others still smaller.

The pyramid has 6 layers; the three upper ones are 1 foot 11 inches each; the fourth layer is 3 feet 4 inches; the fifth 3 feet 3 inches, the sixth 5 feet 5

inches. This last one is composed of two layers, which do not project beyond each other. A lower one than all is still visible. The dimensions taken round the sixth layer, not counting the lowest, of which the surface alone is above the earth, are as follow :—

Length, 43 feet.

Breadth, 39 feet.

I observed some broken small steps in front, but I question if they belonged originally to the building, round which is a square inclosure, and shafts of columns at regular intervals, I believe in their original places. They were plain and Doric ; indeed the effect of the whole is very Grecian. At the south corner was a burying-ground, and a well, which is now dry. On the south-west side was a bush growing out of the steps, and hung with votive offerings.

This building, which is believed to have been built by Dirs, is said to be the tomb of Beebee Hanana, the wife of king David, and mother of Solomon, called Um-un-Nebi. Her body is said to have been conveyed into the roof, that no man might come near it.

We left the Mesjid i Mader i Suleiman at a quarter past four, and arrived at Kilmun or Killalek at half-past seven. The quantities of partridges we saw in the pass were prodigious. We also saw a flock of fifteen or twenty mountain goats, scaling the rocks with surprising agility.

August 21st.—Off at a quarter after four, on our

return to Persepolis. For variety's sake, I resolved to return by another road, which was said to be shorter, though much worse, than the one by which we had come ; so we crossed the plain to the hills on the opposite side to Kilmun or Killalek, distant about three miles and a half. The plain hereabouts was quite uncultivated, and covered with the liquorice plant. At the foot of the pass over the hills was an artificial tumulus. We passed a good deal of wood, hawthorn, broom, &c., and a tree very like the mountain ash, the berries of which are eaten. Quantities of partridges were to be seen and heard in every direction. Having crossed this hill, we entered into a chasm or gap in the mountains, where no one would ever have thought of looking for a road. It lay between two perpendicular cliffs of marble of very great height, was very winding, rough, and difficult, and just broad enough for single file. The cliffs were often curiously weather-worn, and tinged with the effects of oxidation. In one part I observed red ochre.

This pass, which is a mere rent or fissure, and in which we continued near an hour, is called the Tenj i Paroo. It opened at the village of Paroo, or more properly Farough, and at seven o'clock we came into the very fine valley which is the continuation of the Nakshi Rustum Pass, and out of which we turned a little higher up, on our way to Siwend.

We halted here until ten minutes to eight, and

then marched again close along the east boundary hills. As we got among cultivated grounds and stopped frequently to inquire our way, we did not arrive at our halt for the night, at the village of Seidoon, till ten minutes to ten, though it is properly only one hour's march from Farough.

Seidoon is a fine village, close under the east hills, with very extensive and excellent gardens, producing, I was told, very fine fruit around it. We were lodged in the mosque, which had the recommendation of being very clean. I would particularly warn travellers against some very dangerous pits in the neighbourhood of this village, which need particularly to be guarded against in night marches.

August 22nd.—We mounted at four, and soon came to the river Pervar, which we forded. It comes down the valley of Siwend, and, crossing our road, makes a sweep to the left, then crosses our road back again, and flows near Nakshi Rustum. After fording it again we came to *our* ancient city, which our present guide called Salkh or Istakhar, passing this time between it and the hills on the left. We came first to the remains of a gateway, composed of enormous stones; hence, rounding the point and passing by Nakshi Regib, we arrived about half-past six at Persepolis, and I pitched my tent by the side of the first portal, at the top of the fine staircase. I took a hasty walk round the ruins before it became quite dark, and afterwards when

the moon rose I again wandered out among them. The effect of the moonlight was very fine, especially upon the portals.

August 23rd.—In the morning early I went first to visit the tombs. In the first were two sarcophagi cut out of the rock, 9 feet 4 inches long, by 3 feet 10 inches broad. The tomb itself was 21 feet long by 11 feet 1 inch broad; it was mostly filled up with mud brought in by the rains. There was a mud inclosure round the whole, and it was separated from the platform by another. I observed marks of iron cramps to join a piece of the rock, exactly as at Cyrus's tomb.

The frontispiece was very fine: the figure of the priest was rather squat and *over-headed*, but the execution of the whole was very beautiful. The second tomb was in a more ruinous condition, and generally of the same design as the first one, but it is by a different hand, and *I believe* is more ancient. The priest is better sketched; in the inside were three alcoves, but no sarcophagi.

The general view of the ruins was grand: the colonnade, in which fifteen columns were still standing, very fine; the principal building rather what the French call *écrasé*, stuffed and very heavy; but the execution of the whole was beautiful. The portals at the landing-place were much too narrow; all the doors were narrow: in short, the same defects were conspicuous in these as prevail in modern oriental buildings. The whole ruin, how-

ever, is extremely interesting. The beauty and fidelity of such of Sir R. K. Porter's drawings as I recollect struck me forcibly.

I was out all the morning wandering about the ruins. The inscriptions round the windows in the first building going through the colonnade are all the same.* In many parts of the ruins it may be seen that the enormous blocks of stone have been hollowed out, to make them more transportable, as at Mesjid i Mader i Suleiman.

The plain in which these celebrated ruins stand seems very favourable to longevity. More than one person was mentioned to me as having attained the age of a hundred; and there are many who remember Nadir Shah. These are distinguished by the appellation of Dour i Naderi.

August 24th.—I began copying the three inscriptions on the high pilaster of a single stone in the south-west corner of the *écrasé* building,† which is marked G in Niebuhr's plan,‡ of which a most incorrect copy has been published by Le Brun.

I set a party to work to clear out the south face of the platform on which the above-mentioned building stands, as there are three inscriptions on it, and a row of figures§ very perfectly preserved, from their

* They pretend that a Mullah, of the name of Karkhi, made out the inscriptions.

† See Plates 13, 14, 15.

‡ Voyage d'Arabie, &c., par Niebuhr, tom. 2nd, p. 98, tab. 18, p. 111, tab. 26. Quarto.

§ They had on fluted *kaouks* and quivers. Query—do these figures represent the troops called the immortals?

having been under the rubbish. There is nothing Babylonian in the Persepolitan costume, which consists of a loose dress, long and wide, tucked up on one side into the belt, very loose wide sleeves, almost as wide at the arm-hole as the waist is long, which were thrown up in action, leaving the arm and side of the body bare, and hung down in folds behind. See the figures of the man stabbing the lion, &c.

August 25th.—On the pilaster* in Niebuhr's building G, whence I copied the three inscriptions, was a Persian Ghazel, subscribed by Sultan Ibrahim, son of Sharokh, son of Tamerlane! Also a long one in Hebrew by some Jew.

Every inscription in Persepolis, even the bits on the robes of the figures, are in the three kinds; one line of each of the two last of which expresses two lines of the first, or in longer ones there is a line less of the second, and one less than that of the third; or, if the number of lines is the same, those of the second and third are shorter, and the letters wider. The wedges in the third cross each other, which those of the other two never do. The separation or stop in the first is \searrow , in the second ∇ , in the third \blacktriangledown .† When an inscription is round a door or window, the first species is on the top, the second on the left hand, running up, the third on the right,

* The opposite pilaster has disappeared.

† In the third the \blacktriangledown also forms a component part of a letter, which the stops in the others do not, and is also part of a letter in the second species.

running down. I speak as looking at the door. I was much struck with Grotefend's* sagacity.

There are no inscriptions on any of the buildings in the east quarter, or lowest part of the platform.

I was much surprised at the strange corrupted dialect spoken by some Arabs I met here, which was, however, intelligible. They were of a tribe called the Kishikjees, which encamps hereabouts; but I should never have distinguished them from the other Eliauts. They had much of the deep guttural. I understand they are connected with or belong to the two tribes here of the Beni Jebbar and Beni Sheiban.†

August 26th.—On the face of the platform on which Niebuhr's building G stands are three inscriptions,‡ which I laid open, and copied.§ They are

* A German, who applied himself to the deciphering of the arrow-headed characters of Babylon and Persepolis.—ED.

† A book was brought me transcribed in A.H. 670, by a man who entitles himself El Shebani El Facri, which proves the establishment of the Sheibani Arabs in Fars at that period.

‡ See Plates 20, 21, 22.

§ Niebuhr says, respecting this building and the inscriptions, "L'édifice G est du moins de huit pieds plus haut que les colonnades. Il semble à proportion de sa grandeur avec celles des autres bâtimens que celui-ci est fait le plus fort, et les murailles, ou plutôt les fenêtres et les fausses fenêtres, sont aussi encore les mieux polies. Comme le vent n'a point ici un passage aussi libre qu'auprès des colonnades, il y a beaucoup de poussière dans cette édifice et autour, que le vent y a portée—ce qui fait aussi, que le fondement au côté méridional de l'édifice n'a que deux et demi pieds de hauteur sur la terre. On voit encore ici les bonnets des figures, qui d'ailleurs sont couvertes de poussière, trois inscriptions, et divers ornemens. Si j'avais eu avec moi les Voyages de Chardin et de la Bruyn, et que j'eusse su ainsi

between a line of *Kaouklees*, who face to the centre inscription, in Zend. A vacant and lower space then occurs, after which a platform facing the north, which apparently also had three inscriptions, but only the centre one is left, the upper half of which is almost entirely defaced and disfigured with lichens and weather stains; the lower half is perfect. It was below ground till I laid it open.* There is no standing building on this platform, which is the southernmost.

Adjoining, on the east, is Niebuhr's building I. He has copied the inscription of four lines, which is above the figure on the north portal, and I therefore copied the one over that on the east portal.† I also collected the fragments of the robes, at least three of them, the fourth in the western portal being too much destroyed.‡ In this building were two high stone pilasters facing each other; the one was to the east, the other to the west, like the one in Niebuhr's building G and also with three tablets, but not in so perfect a state: the inscriptions on the west pilaster I copied; § the ones on the east are the same, but still more defaced.

In the eastern part of this building is also a very ruinous staircase, with figures, and the remains of

que mes prédécesseurs ne les avaient pas dessinées, j'aurais fait ôter entr'autres ici la poussière, et j'aurais tout dessiné. Actuellement cela est réservé à mes successeurs."—Voyage en Arabie, tom. 2d, p. 111. (Quarto Edition.)

* See Plate 23.

† See Plate 18.

‡ See Plate 19.

§ See Plates 16, 17, 18.

three inscriptions, but in so very shattered and mutilated a state that it was not worth while to copy them.

The inscriptions round the door-cases in this building are all the same, and is the one given as a translated specimen by Grotefend, at the bottom of his Zend cuneiform alphabet. They are the same also with those round the windows of the building G. An inscription from the portal of G has been given by Niebuhr; the blacking he put on it, to render it visible, is still to be seen.* The inscriptions on the portal of G are all the same.

I observe that the Zend always occupies the pre-eminent place. If the inscriptions are one under the other, the Zend one is always in the upper tablet; if round a door or window, it is on the top; if side by side over a figure, it is the one over the head of the king; if on his robes, it is on the front fold; if on the face of a platform, it is in the centre, with the figures on each side facing towards it. Even when the course of the letters would seem to prescribe otherwise, that is, when the king is on the right hand, the Zend tablet is still over his head, and consequently the last of the tablets, though the order of the letters of all the inscriptions is from left to right. The other two species always preserve their order; the third in the place of least consideration.

The top of the inscription on the great sculptured

* Niebuhr visited Persepolis in the year 1765.

staircase is gone ; only twenty-four lines of it remain, and the upper ones of these are much defaced. The corresponding two tablets have been prepared for the inscriptions, but none have ever been engraved on them. The Zend inscription, the only one left, contrary to the usual plan, is at the right hand.

In taking a ride yesterday evening, Mr. Tod discovered in the rocks, at a short distance to the south of the ruins, an unfinished royal sepulchre. The upper compartment, an altar and a figure, were finished, but no cave had yet been hollowed out. The stones had been carefully cut away in large blocks, as if intended to be used in building. On the left side were two figures sketched and roughly hewn, but not terminated. To the north of the ruins, towards Nakshi Regib, are some very small hewn caves. All along the hill, and even close to the ruins, are blocks of stone ; some hewn out, some not yet perfectly detached from the rock. There are two figures also lying down, but in a shattered state.

The stones at Persepolis have evidently all been cramped with iron, as at Morghaub, but it has all disappeared. When there has been a split on a large block, it has been carefully cramped ; and where the stone has had a flaw, or has not been of a due form for the sculpture, a piece has been added and neatly fastened with iron.

The northernmost of the eastern buildings, which is the largest and most magnificent, has had at its northern face a colonnade or portico, with a

sphinx at each end. The sculpture here 'is a king, with all his guards drawn out, giving audience to an ambassador.*

The people brought us some wild figs : they grow about the hills and among the walls of the ruins. The fruit is small, but many of them were well tasted.

August 27th.—I went in the morning to copy the inscriptions at Nakshi Regib.† The Seyid finished copying the three tablets of the north wall of the eastern portal, over the colossal sphinxes.‡ Those on the opposite or south wall of the same are exactly similar. The inscriptions on the west or entrance portal are different from those of the east portal, but the same also on both the walls. The inscriptions of the west portal still remain to be copied; and I fear I shall go away without effecting this. I would gladly have copied both portals, but my head will not allow me; as, in order to accomplish it, I must mount on a ladder.§ However, the Seyid was accustomed to hear much from Bellino about cuneiform inscriptions, and I have exercised him, under my own eye, to help me.

* In Mr. Rich's Journal this sentence is preceded by an N.B.; so that it does not appear certain whether it is connected with the preceding one or not, or whether the sculptures here described are meant to refer to the building just before mentioned, or to some other, and merely inserted here by way of memorandum. This can only be decided by some traveller when on the spot.—ED.

† See Plate 12.

‡ See Plates 24, 25, 26.

§ I copied the high inscriptions by means of a telescope fastened to a staff.

I have now copied all that I can : there remains for the diligence of future antiquarians the three tablets over the first sphinxes on the top of the staircase, and the Sassanian and cuneiform inscriptions at Nakshi Rustum.

The platform is of a very irregular figure, with numberless juttings out. This arises from the builders having accommodated themselves entirely to the natural hill, which greatly injures the effect. Indeed the whole *system* of building is too much broken into parts to have ever been grand as a whole, though some parts may have been so—especially the colonnade ; but in others the proportions are both small and heavy, proceeding from the disproportionate application of vast materials, which is after all a foolish ambition.* The natural hill has in some places been hewn down, as may be seen at the south face of the upper platform ; and the staircase, which descends from it to the great platform, is likewise hewn out of the natural hill.

In the afternoon I had a troublesome and round-about ride to Nakshi Rustum, on account of the number of canals and water-courses, derived from the river Pavar, in the valley ; and some of which were very disagreeable, muddy fords.

The mountains on the northern boundary of the defile of the Pavar river form a wing of stupendous perpendicular cliffs, which gradually slope off to a

* Nevertheless we ought to be grateful to them for it, as otherwise little or nothing of these ruins would have been left, and we should have had no specimen of the ante-Alexandrian age.

point; and on this point, which is the westernmost extremity of the defile, are the sculptures of Nakshi Rustum. The most remarkable objects are four tombs of kings of the ante-Alexandrian dynasty. On the third from the point are two long tables of cuneiform inscriptions in the upper compartment; one on each side of the priest and altar, and two on the lower, one on each side of the door. They are the longest of all the cuneiform inscriptions I have ever seen. In fact there is a prodigious quantity of writing on them, but so small, and so high up, and so much worn, that I should think it impossible to copy them. The two tables on the top, I conclude, contain the original Zend; and the other two, which are rather larger, the two translations, or copies, in the second and third species. All these sepulchres have been violated; and from a little distance the sarcophagi, or at least three of the tombs, may be seen through the apertures broken in the doorways. The Sassanian tablets are under these, and are very coarse and heavy productions. Nevertheless the one which represents a woman suppliant has a considerable effect from a little distance; and one could not help being somewhat afflicted to see the majesty of Rome, even the Rome of Valerian, so humbled before a barbarian.* There is a very long and minute Sassanian inscription, which it would be now almost

* The emperor Valerian was defeated in battle and taken prisoner near Edessa by Sapor, the king of Persia, A.D., 260.—See “Gibbon’s Decline and Fall of the Roman Empire,” vol. i. ch. 10. p. 274. Quarto edition.

impossible to copy, from the roughness of the face of the rock, but which I have no doubt would prove very interesting. Further on are four more inscriptions on the figures disputing the diadem; two in Sassanian, and one in Greek, are on the breast of Artaxerxes' horse; and one, much defaced, in Sassanian, consisting of two lines, which is on the breast of the Arsacidan king's horse. This it would be very interesting to have; but I could not get at it without ascending a ladder; besides which there seemed but small hopes of my being able to make anything out of it.

The rock is coarser grained than at Nakshi Regib, and apparently has never been polished. The figures look roughly hewn, and are in nowise to be compared with those of Nakshi Regib, of which Porter's drawings are admirable. The faces, however, are all preserved at Nakshi Rustom: in other respects the costume is nearly the same. The Arsacidan king has always a fillet round his head with an open crown, his hair being gathered up through the top in curls: below the crown it falls on his shoulders in carots; his beard also is in carots. The Sassanian king has always the curious balloon on his head, and his hair sticking out on each side in a preposterous bush of curls.

On the point over the last sculptures is the shaft of a column, about five feet high, still standing, and the remains of a staircase up to it. I *believe* this to have been a fire-altar.

The fire-temple, which stands in a square heap of rubbish (as of ruins), is a neat, well-finished, and very solid building, and surprisingly fresh. Indeed everything here looks very fresh.

In returning home I noticed a square solid platform of large stones before the mouth of the defile, near the south side. This the natives *say* is a part of the Takht i Jemsheed, which is the only name by which Persepolis is now known; and my observation of these ruins confirms their report.*

Hereabouts I remarked numerous Eliauts (mostly of the Sanjarlee tireh) of the Nefer tribe, who are *Turks*.† The Nefer is a large tribe, of which there are seven tirehs or branches, such as the Sanjarlee, Heiderlu, &c. The peasantry were everywhere treading out the corn.

It had been long dark when we returned home. Mr. Tod, though tired, had the complaisance to get up at midnight to count at the chronometer for me, whilst I took circum-meridian altitudes of Fomalhaut.

August 28th.—This morning about a hundred families of Eliauts passed on their way to a fresh place of encampment. They called themselves

* I was told of two other places where sculptures and inscriptions are to be seen, which have never been visited by Europeans. The one is called Ukted, a mountain south-west of, and forty farsakhs from, Shirauz: the other is Kelaut, at one hour and a half from the former. At Fasa likewise are some sculptures; and at Nahavend; and in Loristan.

† I observe the Turkish Eliauts always call the Persian language *Taujiki*.

zergers or goldsmiths, and said they were a tireh or branch of the Shah-seven tribe. With us they spoke Turkish, but among themselves a curious dialect which they called Zergeri, of which I collected a few specimens.* By some of their words, and some of their habits, they would seem to be gipsies. They are very expert coiners and falsifiers, and also are famous catchers and trainers of hawks; and, above all, they are celebrated thieves, especially renowned as sheep-stealers. The tribe of the Shah-sevens in the neighbourhood of Kazveen speak exactly the same dialect, and bear the same character.

We bade adieu to Persepolist† at a quarter before four o'clock in the afternoon, and set out on our return to Shirauz by a different route, as far

* 'Yena'—To come.

'Ave' or 'ane'—Come.

'Ja'—Go (imp.).

{ 'Keni jeta'—Where are you going?

{ 'Kari ktchira'—Where are you going?

'Yelibish'—Sit down.

'Iktitchast'—Get up.

'Su gherdan'—What have you done?

'Dizi'—A plain.

'Sudmanki'—Let us go and walk about.

'Kalyoon tchak kur, tchi dow'—Fill a kalioon, that I may smoke.

'Yagh'—Fire.

'Panee'—Water.

† *Sights with the compass from the centre of the great staircase.*

Nakshi Rustem, about N. 12 W.

The centre of the garden-house, N. 88½ W. (One mile.)

Centre of Kinara, S. 40 W. (Two miles.)

The bridge of the Araxes (Pool i Khan), S. 56 W.

Bendameer, S. 15 W.

as Zergoon, for the purpose of visiting the Bendameer.

At twenty minutes after four we passed the village, or rather little town, of Kinara ; a respectable-looking place, walled, as almost all the villages in Persia are, and with considerable cultivation around it.

At five we came to the village of Reshmigoon, which was walled, with towers at the angles, and a deep but narrow dry ditch around it. The place seems formerly to have been much larger than it is at present. We passed some families of the Basirri Eliauts, and saw a prodigious number of jerboas. The plain was green, uncultivated, and overrun with liquorice. To the south-west we could not see the termination of the plain.

After passing at some miles' distance the village of Doulatava, we arrived at the village of Bendameer, which takes its name from the dyke on the Araxes, which is built of small stones, with arches all along, of brick-work, to let out the water, which, rushing down with an agreeable noise, forms three little streams that unite just below the Bend, and run through the Colvar district.

Above the Bend many streams are drawn off to turn mills, of which there are a great number here. The banks of the river are fringed with willows and rhododendrons. The village is built on both sides of the Bend, and the principal house is even on it. The situation is at the southern termination, or rather beginning, of a line of rocky cliffs which run up north-

west, and appear to terminate about two miles west of the commencement of the similar line of cliffs which begin at the Pool i Khan. There is a remarkable circumstance to be observed concerning this line of rocks, which is considerable, and that is, that it begins at once and terminates in the plain.

Our head muleteer Aga Mohammed Taki, a curious humorous sort of fellow, it seems had settled it in his own mind that we were to remain for the night at Bendameer; for when we came near it he pushed on before us to secure quarters; and in the Bend I was met by the chief of the village, who came to meet me, and to invite me to stay there that night. I had intended going on to Zergoon, but I allowed the muleteer to have his own way, and agreed to his arrangement; being further enticed by the inviting appearance of a clean kioshk or balakhoneh at the top of the house on the Bend, prepared for me by the chief, and the rushing sound of the waters, which promised an agreeable night's repose.

August 29th.—The Bend, which consists of thirteen arches, is three hundred and fifty feet long and eighteen feet broad, but is in a very ruinous condition. I ascertained on the spot that it was built by Emeer Adhad ud Doulah, one of the Dilemite sultans; and further, that the river does form a salt lake about twelve farsakhs distant from hence, at the end of the Colvar valley. From the number of ways

in which I have verified this point, I consider it to be now satisfactorily proved.

We had at dinner a dish of delicious fish from the Araxes. At four o'clock we mounted, and marched along the foot of the eastern side of the ridge of rocks which commences at the Bend. Upon my inquiring why we did not go by the west side, which appeared to be the more direct course, I was informed that a line of hills extended across from the back of the Zergoon hills to the ridge of rocks, and closed up that part of the plain, which I afterwards found to be the case.* After following the hills for about five miles we crossed into the plain of Zergoon, and our road was then west to the point of the Zergoon hills, down which we turned south-east, and arrived at Zergoon at twenty minutes after six o'clock in the evening. Just outside the town I observed a little mosque covered over with two domes, and was told that it contains the remains of the famous poet Nescemi, whose works contain many good passages in the Hafizian style. By-the-bye, I have remarked that all the Sufy poets are canonised. We were entertained here at night, or perhaps I ought more truly to say annoyed, with Persian musicians, who sang us many songs; their loud and powerful voices being accompanied by the unmusical and noisy *zoorna*† and *dombelele*.‡

* Our course was first N. W., and afterwards, N. 80 W.

† A kind of horn or trumpet. ‡ A small hard-sounding drum.

August 30th.—We left Zergoon at a quarter before three, as I was anxious to reach Shirauz by daylight. We pursued our course* first across the plain of Zergoon, then along the slope of some hills, with a continuation of the plain winding on our left; and afterwards we ascended into the oval plain in which stands the caravanserai and guard-house called Rahdar i Bajgah. On the left hand of the ascent, and on the summit of the ridge which forms the eastern boundary of this oval plain, is a very remarkable piece of rock, standing up, which forms rather a striking object from many points, especially from Zergoon, where some of the inhabitants pretended that it was a building; but I have since ascertained that it is quite natural.

In the valley of Zergoon we saw many families of Eliauts of the Bulverdi tribe encamped; and we were told that a robbery had been committed on this road yesterday evening.

A troop of Lotees with a young bear and a hideous baboon waylaid us, and insisted upon entertaining us for a few minutes; after which we proceeded, arriving at the caravanserai situated at the western extremity of the oval plain at five. Thence we immediately mounted a steep ascent, and descended into the winding pass which continues all the way to Shirauz.† One of the streams of the Ruknabad now kept us company the rest of the way.

* N. 60 W.

† Course S. 50 W.

It was beautiful limpid and cold water, very far superior to any we had tasted on our trip: it is brought in an artificial channel to Shirauz.

A little after six we came to Akberabad, a little mud fort, or palanka and farm, recently constructed. Thence our course was southerly, but very winding. There were several parties of Zengeneh Koords just encamping in the narrow valleys. We passed an ice-house, now apparently quite out of repair. There was a high mud wall built on the south side of it to keep the sun off and the south wind.

At a quarter past seven we found ourselves in our old quarters at the Jehan Numa. The whole time of our march to-day was four hours and a half, of which we only lost a quarter of an hour by stoppages. This was very good going.

September 1st.—I rode into town to see the curiosities, and go to the bath. The bazar is an uncommonly fine building, built of brick, in the form of a cross, with a very high vaulted roof. I think it is finer than anything of the kind in Constantinople, but the merchandise is not so showily arranged, probably from the shops being larger and more commodious within. The caravanserais, though good, are not to be compared with the Khans of Constantinople, or indeed of some other towns in Turkey. The mosque of the Vekeel is handsome, but it is defective in the want of an imposing entrance; nor is it to be compared with the mosques of Constantinople, Cairo, Amasia, Da-

mascus, &c. Indeed the bazar is the only thing well worth seeing.*

I must say I think the people of Shirauz surprisingly insolent. Much as I have travelled, both

* The following are some of the principal articles of the commerce of Shirauz:—

Imports from Bushire.

Cloves, cinnamon, nutmeg, mace, pepper, China-root, sugar-candy, cassia, sal-ammoniac, tin, ebony, ivory, sandal-wood, cochineal, indigo, porcelaine, glass-ware, steel, cocoa-nuts, broken glass for the glass-houses here, incense, aloe-wood, iron, lead, cotton (sometimes), camphor, chalk, quicksilver, stuffs, Aghabani muslins, dimity, handkerchiefs, silk and cotton, Bengal chintz, Lucknow ditto, long cloths, palampores, teharsaffs or sheets, kaitan (a kind of thin linen), kinkobs of all sorts, China satins, China crapes, tea, Muscat limes, Bussora abas.

European Goods.

16 kinds of cloth, casimeer, shalloon, velvet, velveteen, plush, blankets, chintzes from all parts of Europe, printed muslins, long cloth, Irish linen, muslins, jaconot, guns, pistols, gun-locks of all kinds, powder, shot, flints, door-locks, knives and scissars, coarse paper, razors, prints and engravings, glass, paintings, silk, wax candles, otter of roses imported from Constantinople through Bussora.

Exports to Bushire.

Wine,^a rose-water, otter of roses in small quantities for India, assafœtida, dried fruits, silk, goats' hair, saffron, caramanian wool, sehkhisht (a kind of manna for medicine), almonds, nuts, spices, horses, orpiment, madder, tobacco.^b

The goods brought from Bushire to Shirauz are sent to Ispahan, Teheraun, Casbin, Tabreez, Hamadan, Erivan, Resht, Mazenderaun, Yezd, Kerman, Meshed, Khorassan. There are 2500 mules constantly employed between Shirauz and Bushire. The revenues of Shirauz—800,000 tomans annually are the clear revenue, out of which there is generally paid to the king 30,000.

From the lake 3000 ass-loads of salt are brought annually, and more might be collected if necessary. Each load sells for half a piastre ain, each being $8\frac{1}{4}$ Bagdad batmans. The lake belongs to Aga Baba Khan.

^a 360,000 quarts of wine are annually made at Shirauz, of which 40,000 go to India, 10,000 to Bagdad, Bussora, Bushire, &c. All the rest is used at Shirauz.

^b 120,000 batmans are annually produced. The best come from Kazwin and Jaroon, all from the Ghermaseer. There are 350 estates or farms of tobacco cultivated.

as a private unknown individual, and as a public servant of the British Government, I was never in a place in any part of the East, where the protection of an officer of the local government is so much required.

September 3rd.—I went this morning to the Hafizia, to lay a copy of the works of Hafiz, which I purchased here, on his tomb, and thus enhance its ideal value as a curiosity. Its real value will be also greatly increased by a very careful collation which my Persian secretary, Seyid Mohammed Aga, has undertaken conjointly with the dervish who has charge of the tomb, with the copy deposited there, which is a large well-written one, transcribed for the express purpose by order of Kerim Khan, and reckoned very authentic.* It is much worn, how-

* The Seyid, besides a complete collation of my Hafiz, with that preserved at the Hafizia, has made a Defter, or list of the first lines of all the Odes contained in the latter. The numbers under each letter are as follow:—

ا	15	ر	21	غ	1
ب	6	ز	14	ف	1
ت	78	س	8	ق	3
ج	4	ش	24	ک	6
ح	2	ص	2	ل	12
		ض	3		
خ	1	ط	1	م	81
د	167	ظ	1	د	26
ذ	5	ع	4	و	13

ه 17 ی 87

Total, 603 Odes, besides the Kasayed.

ever, by people constantly having recourse to it for *fals*, or omens. I took one to comply with the custom of the place, which came out with a singular coincidence.

The dervish is a very polite and well-informed man; he knows the poems of Hafiz by heart. The old marble of the tomb of Hafiz was taken away by Kerim Khan, and part of it now adorns the Haouz* of the Koolee Frenghi, in the garden of the Jehan Numa, where I am living. The stone called Ta-breez marble, which Kerim Khan substituted, is nine feet ten inches long, and three feet seven and a half inches broad, and one foot three inches thick. Near Hafiz lies buried Abdulla Pasha, of Zehav,† who died here forty-five years ago, on a mission, I believe, to Kerim Khan.

It surely was a foolish vanity, or very misguided zeal, in Kerim Khan, to remove the old monuments

To my great surprise the last Ode under ک in this collection is من دوش پنہا ن صی شدم در قصر جافان سکنک, which was published in one of the first numbers of the Asiatic Miscellany, and was, I believed, always deemed by connoisseurs to be authentic. I had never seen it in any edition of Hafiz, nor did I meet with any one who had. The rhyming word is, *I believe*, (for it is many years since I have seen the book,) printed in the Asiatic Miscellany سیگنک which is erroneous, though the translation of it is pretty near the truth. The word is سگینه *Sengeneh*—literally, heavily; but also gently, cautiously—Ashté Ashté. The ode is called in the Asiatic Miscellany “Softly,” an ode from Hafiz.

* A basin in the court of either houses or gardens, for holding water.

† A pashalik of southern Koordistan.

of Hafiz and Saadi, and replace them with modern ones of his own. The original tomb of Hafiz was quite perfect, as the dervish assured me, who well remembers it, when Kerim Khan ordered it to be removed. A cypress-tree was carved in the centre of the slab. The garden too, I was told, was much more extensive then, and the building larger.

Just outside the Hafizia, at the door of a little building attached to the garden-wall, is the tomb of Abdulla, the author of the celebrated Vessaf.

September 12th.—This evening a party belonging to Zeki Khan (the Vizir) came out to the neighbouring garden of the Haft-Ten. They consisted of his two sons, two nephews, and several officers of his household. They were all, with the exception of one son (a child), and one of his nephews, quite drunk, and took no pains to hide it. Yet it is something in favour of the temper and character of the Persians that they are not given to quarrelling and violence in these scenes of intoxication: the most dreadful excesses would be committed by Turks under such circumstances. As a set-off against their good-humour, it must be remarked, in estimating the national character, that the Persians are unthinking, perpetually joking, and deficient in solidity, sympathy, and kindness: they are deficient in feeling and sentiment. In this they are much below the Turks, among whom there is often great attachment, in spite of their religion and government, especially between master and servant. With

the Persians this is very rare. A Persian master is good-humoured, but not in general kind or compassionate, and the servants are, consequently, scarcely ever attached. In short, a Persian is too indifferent to everything; not from apathy, but from a kind of trifling vivacity. Nothing can fix or impress him.

September 17th.—This morning I went to the tomb of Saadi, situated a little way up the pass which goes by his name, and through which the road to Kerman lays. The Saadia is a small square inclosure with a high brick wall, containing a flower-garden, where, *par parenthese*, I gathered some pinks. The north-east side is occupied by a building, consisting of an arched divan at each end and a couple of small rooms in the centre, for the accommodation of benighted travellers, dervishes, and, in short, any who may not know where to address himself for a lodging: it is in fact a caravanserai. In the southern divan stands the tomb of Saadi, a small stone sarcophagus without the cover, which was of carved wood, and has long since been destroyed. His dust lies beneath the floor, as the old *custos* assured me. The tomb is covered with inscriptions, carved in relief on the stone, and is the original one;* as Kerim Khan, when he pulled down the old building (which was an octagonal medrisseh), in order to replace it with one of his own, had in this case the good taste to

* The guardian told me it was now 545 years since the death of Saadi, which would bring his death to A.D. 1276.

respect the old tomb. It is to be wished he had been similarly actuated at the Hafizia ; but Hafiz is considered as a more holy personage than Saadi, and this may have induced Kerim Khan, through a mistaken zeal, to be at the trouble of replacing the old tomb by one of Tabreez marble.

Close outside the Saadia passes the Keraut, or subterranean aqueduct, which conveys water to the Dilgousha. It is enlarged into a little basin, from which an octagonal shaft opens to the surface of the ground. This is of the age of Saadi, and has the remains on it of inscriptions of his composition. You descend the Baun by a flight of stairs under ground ; and there is a ledge all round it, and recesses to sit and enjoy the coolness, which is very agreeable. The water that flows through it is as clear as crystal, and full of fish, which are deemed sacred to Saadi, and no one would think of catching them. The spot, though now ruinous and neglected, is still very agreeable. I amused myself some time with throwing crumbs of bread to the fish, and then went to the Dilgousha, which is at the entrance of the pass from the plain of Shirauz, and is a pretty garden, though deficient in shade. Its chief attraction is the fine stream of water from the canal of Saadi, which runs along the middle of the garden, and is made to rush down little descents, and to fill other courses. The bottom of the canal is full of water-cresses.

This garden was originally planted by Nazer Ali

Khan, who enjoyed the dignity of Shah for about a month in the Zend dynasty. It now belongs to Hussein Kouli Mirza, the eldest son of the present Prince of Shirauz, who has lately purchased it from Keloonter Mirza Ali Akber (son of the famous, or infamous, Haji Ibrahim) for 300 tomans, which is of course far below its value: the Prince is constructing a few rooms in it. It is the favourite resort of the Persians, who are fond of coming out here in the afternoon, and getting drunk by the side of the stream. Wine, running water, and tobacco, constitute a Persian paradise. The water in this garden is said to have some medicinal properties, and to be excellent for washing out stains from cloth, &c. It is also highly in request as a cold bath. Adjoining the garden is a manufactory of common paper.

I have forgotten to mention that there is a village at the Saadia called by the name of the poet. The hills on each side of the pass are calcareous. On the south side, just above the Dilgousha, there is a steep rock crowned with the remains of an old tower, of very ordinary workmanship, said to be all that is left of a castle commanding the pass, which was built by a Sassanian king, and called Kalai Bender. There is a very deep well at the ruined tower. I had not the curiosity to climb up to visit it.

Mr. Tod has just been into town. It seems the cholera is really here, though as yet but slightly. The people call it Taoun, or plague, and confound it

with the Turkish plague. Thinking it to be infectious, some have the inhumanity to thrust those who are attacked immediately out of the house into the street. To show the force of imagination in these cases, one of the Prince's wives was attacked, or supposed to be so, yesterday (very likely from over-eating herself with sweet and greasy messes at the nuptial-feast); whereupon the Prince's sister flew into a violent passion with her, and actually, as they say, frightened away the disease.

September 18th.—The festivities of the wedding* are dismally put a stop to. The Prince's wife died yesterday morning: she had only been brought to bed of a daughter three days ago. Five or six of the slave-girls of the harem have also died. His brother-in-law, who was going to the palace, fell off his horse, and expired before he reached the gate. This morning the disease is said to be very active and fatal. The people are flying in all directions.

The Prince himself has run away to the gardens situated in a neighbouring valley. There is scarcely even the form of a government or any authority left. Nothing prevails but consternation and dismay. People are seen flying across the plain in groups and singly, not knowing whither they are going.

A man has just fallen off his horse while escaping through the pass close by this place, and in-

* See Rich's *Koordistan*, vol. ii. p. 226.

stantly expired. Some dead bodies were lying on the road near the gate, abandoned by their friends. A great many people doubtless die from fright.

More particulars.—The Prince's mother quitted the palace in great haste yesterday evening for the Takht i Kajar, with her son and daughter. When she was taken ill at the Takht, her son, the Prince, immediately cried out like a child—"What shall I do? what is to become of me?" not thinking of his mother, but only of himself. He ran about distracted for some time: at last he and his sister mounted their horses and rode away, followed by two or three servants, as fast as they could scramble on their horses, as if they were pursued by an enemy, leaving their mother to herself, who expired soon after. The Prince and his party went to Dokuek, about three farsakhs off, whither they were shortly followed by some others; and, among the rest, Zeki Khan the Vizir, and Aga Baba Khan. The Prince has left all his wives, women, and children behind him, and, in short, is in too great terror to think of or give orders about anything. The old lady's funeral took place about an hour before noon. The body, in a takht-revan, was preceded by the banner of the lion and sun of Persia, and other emblems; by twelve muezzins chanting, several children bearing covered trays, and by music; and was followed by about forty men-servants. Her body for the present is deposited at the mosque of Hamza outside the walls, till it can be taken to Nejeff.

September 19th.—The disease is still unabated ; but I think the general consternation is somewhat diminished, except with the Shahzadeh and some of the principal people. The former does not think himself safe at Dokuek, but has this morning issued orders to proceed to Nasek, a place towards Ispahaun, where it is said to be very cold. The town of Shirauz is literally left to take care of itself. Several persons in office died to-day, and indeed the disorder seems to attack principally those about court. The Shirauzees say, “ if it takes off so great a proportion of kajars, there is no great harm done.” The parish in which the palace is situated is quite a desert ; there is not a soul left in it, between deaths and desertions. There is one parish in the town in which there has not been a single death yet. Yesterday the deaths, as nearly as I can possibly ascertain by a variety of information, amounted to about two hundred.

Aga Baba Khan has again returned to the town. He says that, if all men of rank leave it, the whole country will fall into dreadful confusion. He is, therefore, resolved to stay, to prevent the consequences of the Shahzadeh’s defection if possible. The latter has not yet issued any orders respecting the provisional government. He has this evening resolved to go to Ardekou, a place on the Beibahoon road in an elevated situation.

We hear that the disorder is making rapid progress in the direction of Ispahaun.

September 20th.—Several persons who were taken ill yesterday after Asser, or afternoon prayer, have recovered, and the deaths are said greatly to have diminished since that time. I hear of no great mortality during the night that is past. Please God the disease has attained its crisis. To-day the Moullahs ordered all the wine in the town to be poured out: they have even seized the wine belonging to the Armenians, and broken all the jars. They have also turned the dancers and singers out of the town.

“ When the devil was sick, the devil a monk would be ;
When the devil grew well, the devil a monk was he.”

As some of Major Litchfield's people were going into the town to-day, they met nine funerals in the streets, which are quite abandoned.

September 21st.—The disorder is still said not to be quite so bad as on the 18th and 19th. There were four or five deaths in the night, which is all that I have been able to ascertain of known people. There may have been some others of ordinary people. One man was taken ill yesterday at Asser, and lingered through the night; he expired this morning. This is the longest period that has yet elapsed between a person being attacked and his death. Yesterday afternoon a Seyid died in the court of the Vekil's mosque. He was a native of Yezd, and seemingly had no friends here. His body was still lying in the place where he expired this morning. No one had had the charity to have him buried.

There is to-day a guard stationed at the gates of the city to prevent any more people from running away. This is rather ungracious, when the Prince himself has set them the example. All who now present themselves at the gate to go out are driven back with sticks.

After mid-day the disorder is said to have increased again. The mortality yesterday and the day before is now said to have amounted to upwards of a hundred each day. The principal line of the disease is through the centre of the town lengthwise; on each side of this zone it is not so bad. One parish has hitherto escaped altogether; and, what is curious, not a single Jew is yet dead. It does not attack children, and is particularly fatal to women.

September 22nd.—The cholera is still very bad: they reckon this the eighth day from its commencement. Eighteen persons died in the night, in Mirza Ali Akber's parish alone. He says fully two hundred died yesterday.

This morning all the people remaining in the town left it *en masse* to pray for a cessation of this terrible visitation. Men, women, and children in immense crowds visited all the holy places about Shirauz, shouting out "Allah! Allah!" There was something very fine and very affecting in the voices of such an immense and suffering multitude ascending to heaven in earnest supplications.

September 23rd.—They say that the disorder is rather better to-day; God knows with what truth. The most correct estimates of the mortality since the

commencement of the disease make it amount to 1800 persons.*

September 24th.—Another day of public supplication, but the effects of it had much degenerated from the ceremony of the other day, and had more the appearance of a crowd of idlers. There was in one place a temporary pulpit erected for a field-preaching. Great crowds of women were strolling about.

I observe in the gardens here a jesamine, which is now in flower, of a lilac colour; they call it Yasmeen i Kebood. I have never seen this species anywhere else.

One of my grooms was taken ill with the cholera last night. It seems to be of a mild kind, as he is still alive, and Mr. Tod even entertains hopes of him.

The poor fellow died about noon. Poor Seyid Ibrahim, my calioon-bearer, is now taken ill.

September 25th.—Seyid Ibrahim is recovered. Another groom taken ill yesterday afternoon, and a woman was brought here at night from the neighbouring garden of the Tchihil Ten, affected with cholera. She was far gone in pregnancy, but she recovered, as did the groom. There is now a police-order cried about the town, desiring no one to use the verjuice, lime-juice, or any kind of acid, when they are attacked, as it has been found to be deleterious. They still, however, adhere to their

* Shirauz contains 5000 houses, which, estimating the population at seven to a house, which I have always found a good average, gives a total of 35,000 souls. Mirza Ali Akber, however, a very intelligent and well-informed young man, allows ten to a house.

equally fatal plan of plunging a man over head and ears into cold water as soon as he is affected, which, doubtless, kills many. To-day the disease is said to be milder, but more fatal to women than on any of the preceding days.

September 26th.—The night was quite cold. The mortality is said to be decreasing, but still very considerable. A wife of the Shahzadeh's, whom he had left behind, died to-day. Our mehtandar, a very good-natured kind of man, told me, with incredible coolness, that a dear friend of his had died this morning, and that another had died yesterday. He spoke with the air of a man announcing the death of his cat.

The sickness has reached the Shahzadeh's camp. He is perpetually shifting his quarters in consequence, and now pretends to be hunting.

September 27th.—The cholera still continues notwithstanding the cold nights. Several cases were brought to-day to Dr. Tod. There is a song singing about the streets in ridicule of the Shahzadeh and Zeki Khan for running away.

September 28th.—This morning I went to see Baba Kooy, a sheikh, or place of pilgrimage, about half-way up the hill, a quarter of a mile north of the pass of Allah Akber. There is a little terrace there like a Mar Mattee* in miniature, but ornamented with a pretty little flower-garden and some trees. It is a pleasant spot, and from it you enjoy a fine bird's-eye view of the city and plain of Shirauz.

* See Rich's Koordistan, vol. ii. p. 74.

Baba Kooy was a chief of dervishes in Shah Akber's time. This tekia was once a favourite spot for people to come to who wished to obtain holy abstraction of mind, but these devout times exist no longer. There is one dervish residing there at present.

September 29th.—My friend, the Persian painter, was with me yesterday evening. He says he can reckon up 1340 people whom he knows personally, or knows of, who have died since the commencement of the disorder. This would make the total number exceed 2000 considerably.

September 30th.—The mortality still continues: it appears to be yet about thirty a-day.

Aga Baba Khan is gaining great popularity by his conduct on the present occasion, and indeed he seems to deserve it. He distributes money and provisions among the poor, is active in preserving order, and in going about comforting all classes of people. Indeed, his remaining in town when all the other great men ran away has of itself delighted the people, though it has rather surprised them, for he is reputed to be a very timid man: however, he seems to have roused himself on this occasion. The Prince has become exceedingly unpopular from his desertion of the town; every one talks of him openly with ridicule and contempt.

I rode this morning to the Takht i Kajar, by far the finest garden about Shirauz. The architect has availed himself of a promontory of the hill which is at the back of the garden to erect his building,

which is handsome and commodious, and seems calculated for defence. The elevation gives the view from it, over the garden and as far as the town, a fine effect. The garden is planted with tchenars, or plane-trees, in the usual Oriental way, with narrow walks crammed full of trees, which are obliged to be clipped into brooms, instead of having a few trees, and allowing them to expand to their natural growth.

From the old woman who showed the house I heard all the particulars of the death of the Shahzadeh's mother, and the inhuman flight of her son.

October 1st.—The mortality yesterday was very considerable, amounting to eighty. There has been a little recurrence of heat, with southerly winds and calms, which may be the occasion of it.

October 2nd.—Aga Baba Khan called on me this morning. A very pleasant man, and less overpowering than the Persians usually are. He estimates the total mortality up to this day at 5600. A holy Seyid, who came from Beibahoon to write charms to prevent the people taking the cholera, and who has made a considerable sum of money by this traffic within the last few days, caught the disease himself yesterday, and died of it this morning.*

* See Rich's Koordistan, vol. ii. p. 236.



王右軍與王敬仁書

一區一區一區一區一區一區一區一區

There is some difference in the handwriting of these incipits, e.g. in one or two of them the initial 'M' is written in a different way. - All the lines should be the same length. -

Impatiens at Stake. i. Right about 2 mi. N. of Perpetua

1 on the head of the Horse

[illegible]

ΤΟΝΤΟΛΥΝΟΝΤΟΥΤΟΜΑΔΑΔΝΟΤΕΘΕΟΥ
 ΑΛΛΗΛΟΥΑΚΙΝΕΩ ~ ΑΚΙΝΕΩΝ
 ΚΑΙΝΑΡΙΑΝΩΝ ΕΙΣΕΝΟΡΘΕΩΤ
 ΜΑΤ ΕΝΟΡΘΕΟΤΑΡΤΑΡΡΗ }
 ΒΑΚΙΛΕΩΝΑΡΙΑΝΩΝ ΕΚΤΕΝΕ }
 ΕΚΤΟΥΣ ΘΕΟΥ ΠΑΝΑΚΟΤ ΒΑΚΙΝ }

2. Before her thro's break, between her fore legs & more.

[illegible]

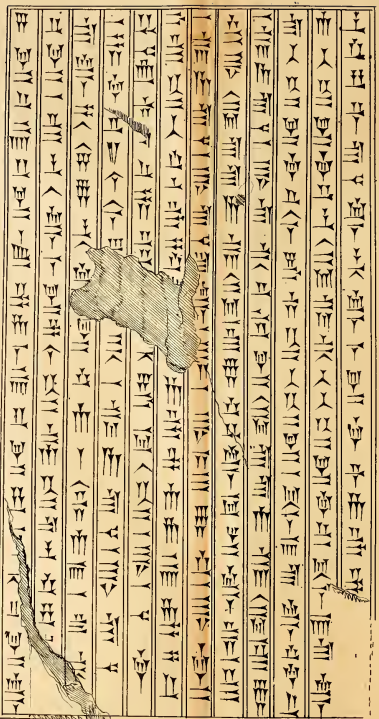
Prophetia N. I.

101 The Nordic or Lough Tattin on the Pindar in C.

13. The leaves should be of like same length.

子四
 子五
 子六
 子七
 子八
 子九
 子十
 子十一
 子十二
 子十三
 子十四
 子十五
 子十六
 子十七
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 子十九
 子二十
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 子九十六
 子九十七
 子九十八
 子九十九
 子一百

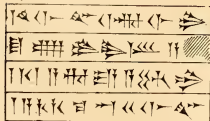
16) Second on verso Tablet on the character in I.



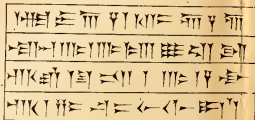


Persepolis No 3 Inscription over the Figure in the East Portal of the building marked I (a King with 2 persons etc.).

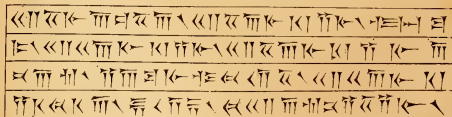
(a) left hand Tablet.



(b) centre Tablet.



(c) right hand Tablet, over the King's head.







Verapoli - 14

On the building SE of the 1st after passing the innkeeper - it is marked I in sketch, who has published the inscription of
to lines (B) at the top of the N. portal over the figures followed by 2 lines 1 riding an umbrella between 2 fly flags - the figure
is expected to be of William of Orléans as the inscription in the 3rd line on W of his robe - these inscriptions are the same in all, whether
new version, or copied by people shipping off pieces - I must say recently, for carrying date. I have copied what remains of 3 of them -
the 1st or western one having been so much altered that only a little of it is recoverable.


(11) For the sake of the figure in the 1st Portal. As the first species is always in the fold toward the front of the paper - the others on that towards the back.

beginning of this is perfect. a long ridge another and variety



(b) on the whole the Figures in the RL points of the species or part fold then only remains.  a very long interval 
on the each fold; on 2nd 8th species - beginning ~~perhaps~~ renewing.
 (The end differs?)

(c) on the figure on the ¹² plate - the beginning wanting -
~~the front fold -~~



This is I believe the real end of the book
 on the back fold - the end
 the word line of paper always to have ended here

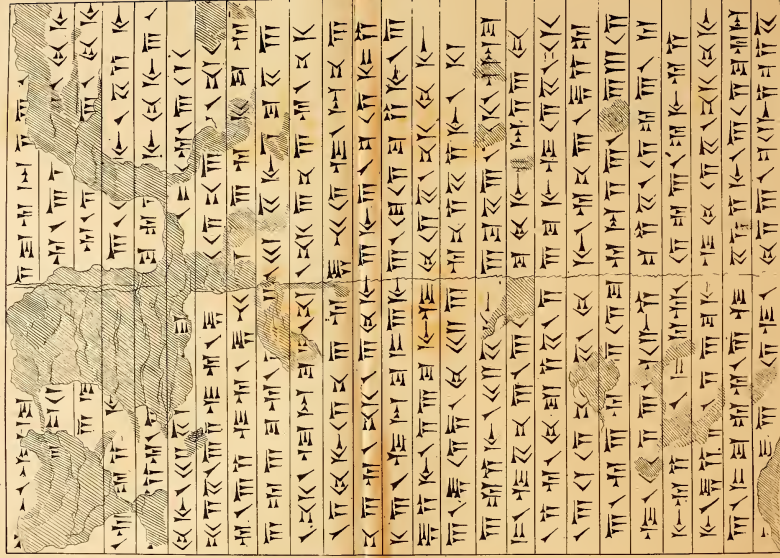
over the round the door lanes the same inside as this of the preceding number. The genitalia (a) is on the top over the door. (b) runs up the left side and runs down the right. none of them are perfect. I find 6 sp. c. containing a few variations in the delineations of some colors (a) is exactly the same as in sp. 3.

16. 一、二、三、四、五、六、七、八、九、十、十一、十二、十三、十四、十五、十六、十七、十八、十九、二十、二十一、二十二、二十三、二十四、二十五、二十六、二十七、二十八、二十九、三十、三十一、三十二、三十三、三十四、三十五、三十六、三十七、三十八、三十九、四十、四十一、四十二、四十三、四十四、四十五、四十六、四十七、四十八、四十九、五十、五十一、五十二、五十三、五十四、五十五、五十六、五十七、五十八、五十九、六十、六十一、六十二、六十三、六十四、六十五、六十六、六十七、六十八、六十九、七十、七十一、七十二、七十三、七十四、七十五、七十六、七十七、七十八、七十九、八十、八十一、八十二、八十三、八十四、八十五、八十六、八十七、八十八、八十九、九十、九十一、九十二、九十三、九十四、九十五、九十六、九十七、九十八、九十九、一百。

[illegible]

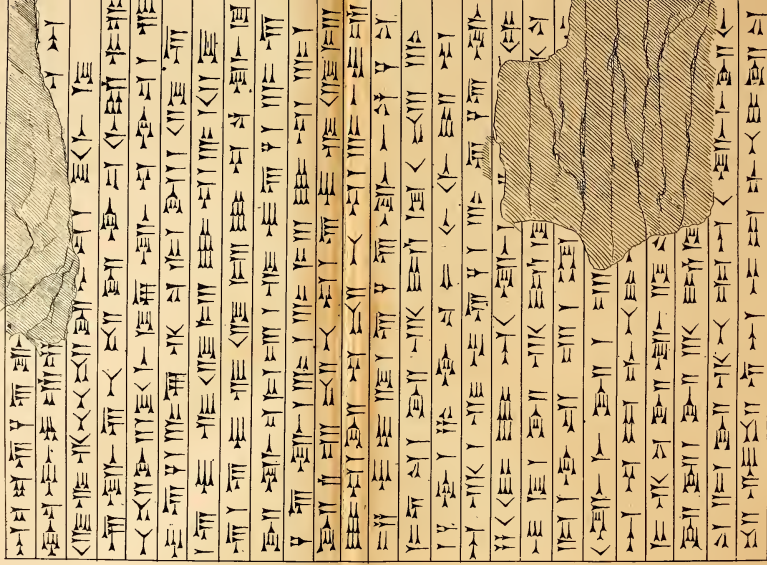
Engraving on the space of the Platform in which the building of St. Peter stands: there three Tablets were fixed in the vault which covered up to near the top of the Platform, and laid open by the door the face of the chief is represented a row of Guards in 2 rows: separated by the center Tablet each being 12 in. the center Tablet.

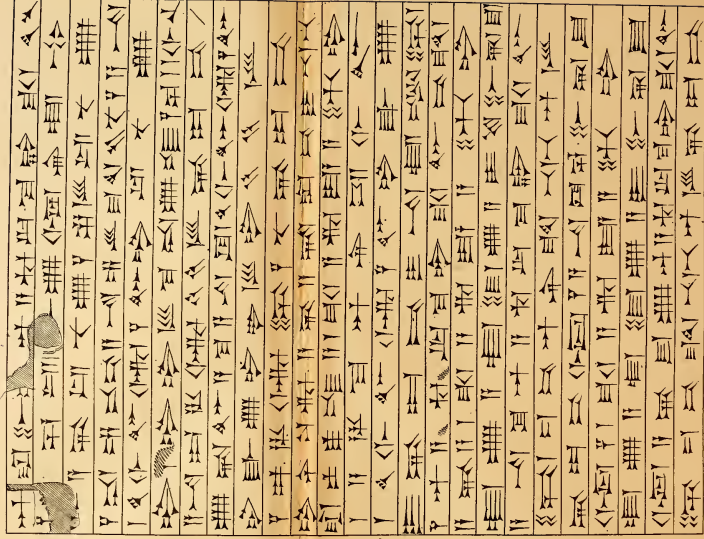
12 in. the center Tablet.

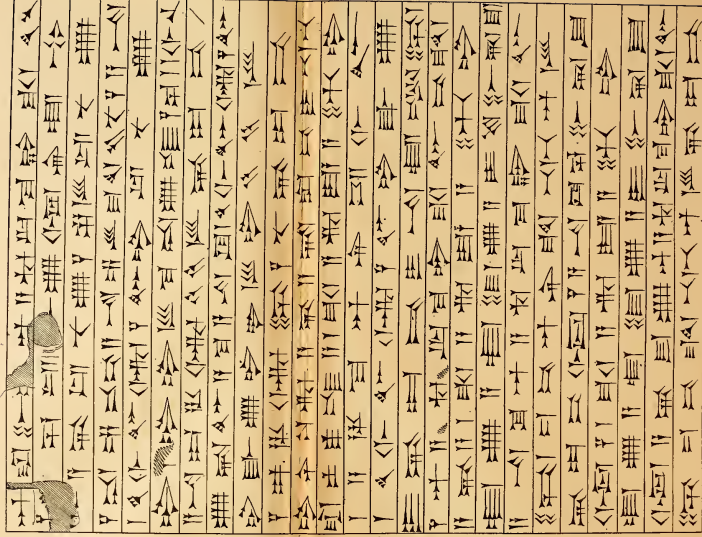


[16] The right hand Tablet of the Platform of C.

As the Tablet was injured by the theft. And restored by me



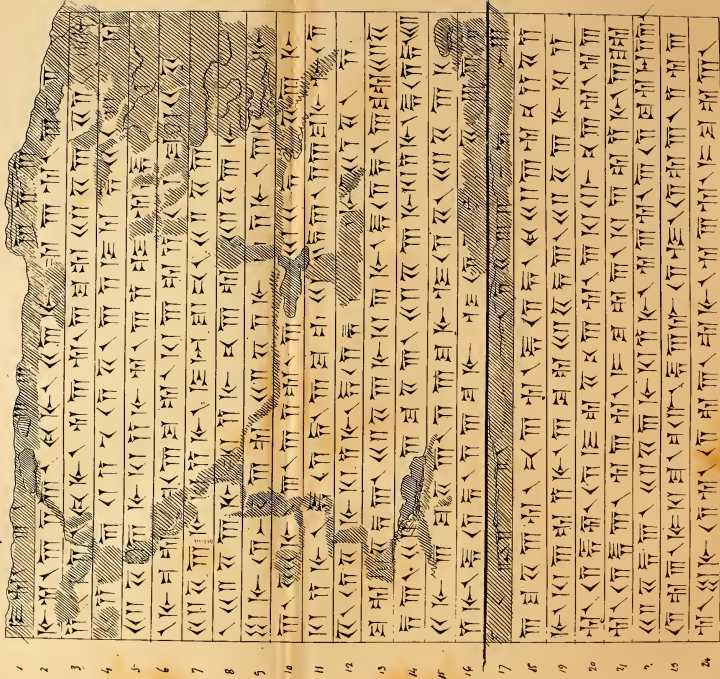




Tombosus No 6

Talbot in the centre of the N face of the Platform. It, directly facing the place where No 5 was located. There is no building now standing on this Platform. This Talbot like No 3, No 4 is in the centre of a row of three, and was also concealed in the rubbish. The corresponding Talbot of this inscription (10 and 6) have entirely disappeared.

that are wanting

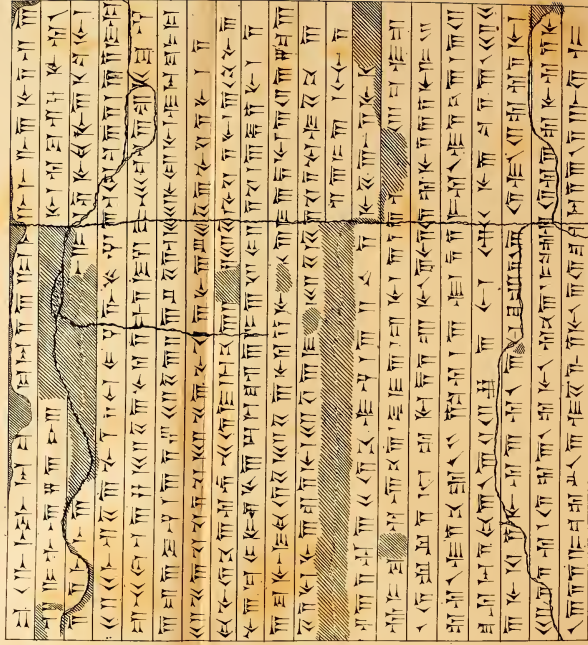


Note. The two preceding Tablets were copied by the Scribe, as I say my self unable from a weakness on the head to stand at the necessary elevation on a ladder. From the same reason I could not verify the Scribe's work. But I have some of the union of his general accuracy from his copy of N° 83, which I caused him to make as an experiment. In this inscription the greater difficulty of the situation may have rendered him less correct: but it is to be observed that he himself corrected some variations in the sense of the latter of these inscriptions.

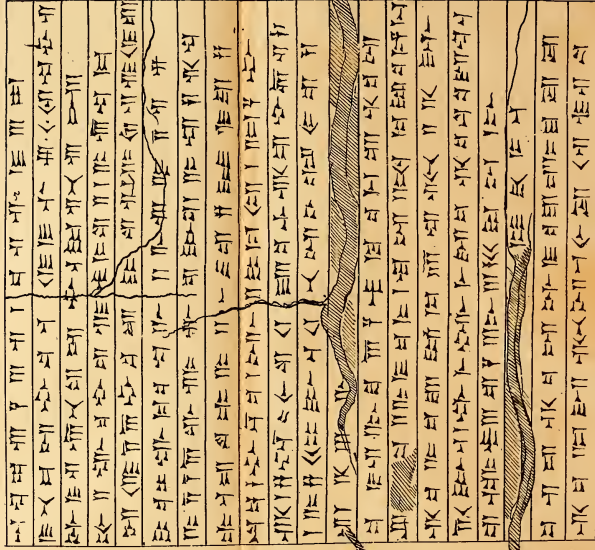
Geogopolis N° 7. Inscriptions on the N^o wall of the Great Portal after ascending the great staircase.

Used on the S^o wall, exactly the same. The Great Portal has a different inscription, but also the same on both walls. They are all read over the colossal mythological animals - and constantly depicted.

(a.) the center Tablet.



161. The Tablets on the right hand



(c) The tablet on the left hand



Note. The inscription in the first tablet is more defaced than this - it is now like only one of the

Persepolitan inscriptions left unscraped

GENERAL APPENDIX,

BY

THE EDITOR.

A P P E N D I X.

No. 1.

(Referred to in p. 55 of Mr. Rich's first "Memoir on the Ruins of Babylon.")

"THE siege of this important place was no easy enterprise. The walls of it were of a prodigious height, and appeared to be inaccessible, without mentioning the immense number of people within them for their defence. Besides, the city was stored with all sorts of provisions for twenty years. However, these difficulties did not discourage Cyrus from pursuing his design. But, despairing to take the place by storm or assault, he made them believe his design was to reduce it by famine. To which end he caused a line of circumvallation to be drawn quite round the city with a large and deep ditch; and, that his troops might not be over-fatigued, he divided his army into twelve bodies, and assigned each of them its month for guarding the trenches. The besieged, thinking themselves out of all danger, by reason of their ramparts and magazines, insulted Cyrus from the top of their walls, and laughed at all his attempts, and all the trouble he gave himself, as so much unprofitable labour.

"As soon as Cyrus saw the ditch, which they had long worked upon, was finished, he began to think seriously upon the execution of his vast design, which as yet he had communicated to nobody. Providence soon furnished him with as fit an opportunity for this purpose as he could desire. He was informed that in the city, on such a day,

a great festival was to be celebrated ; and that the Babylonians, on occasion of that solemnity, were accustomed to pass the whole night in drinking and debauchery.

“ Cyrus, in the mean time, well informed of the confusion that was generally occasioned by this festival, both in the palace and the city, had posted a part of his troops on that side where the river entered the city, and another part on that side where it went out ; and had commanded them to enter the city that very night, by marching along the channel of the river as soon as ever they found it fordable. Having given all necessary orders, and exhorted his officers to follow him, by representing to them that he marched under the conduct of the gods, in the evening he made them open the great receptacles, or ditches, on both sides the city, above and below, that the water might run into them. By this means the Euphrates was quickly emptied, and its channel became dry. Then the two fore-mentioned bodies of troops, according to their orders, went into the channel, the one commanded by Gobryas, and the other by Gadatias, and advanced towards each other without meeting with any obstacle. The invisible guide, who had promised to open all the gates to Cyrus, made the general negligence and disorder of that riotous night subservient to his design, by leaving open the gates of brass, which were made to shut up the descents from the quays to the river, and which alone, if they had not been left open, were sufficient to have defeated the whole enterprise. Thus did these two bodies of troops penetrate into the very heart of the city without any opposition, and, meeting together at the royal palace, according to their agreement, surprised the guards and cut them to pieces. Some of the company that were within the palace, opening the doors to hear what noise it was they heard without, the soldiers rushed in, and quickly made themselves masters of it ; and,

meeting the king, who came up to them, sword-in-hand, at the head of those that were in the way to succour him, they killed him, and put all those that attended him to the sword. The first thing the conquerors did afterwards was to thank the gods for having at last punished that impious king. These words are Xenophon's, and are very worthy of attention, as they so perfectly agree with what the Scriptures have recorded of the impious Belshazzar.

“ In the time of Alexander the Great the river had quitted its ordinary channel, by reason of the outlets and canals which Cyrus had made, and of which we have already given an account. These outlets, being badly stopped up, had occasioned a great inundation in the country. Alexander, designing to fix the seat of his empire at Babylon, projected the bringing back of the Euphrates into its natural and former channel, and had actually set his men to work. But the Almighty, who watched over the fulfilling of His prophecy, and who had declared he would destroy even to the very remains and footsteps of Babylon (‘I will cut off from Babylon the name and remnant’ *), defeated this enterprise by the death of Alexander, which happened soon after.”

ROLLIN'S *Ancient History*, vol. ii.

No. 2.

(Referred to in p. 55 of the first Memoir.)

“ HE (Alexander) had, moreover, a navy of ships at Babylon, as Aristobulus tells us, which were partly brought from the Persian Sea by the river Euphrates, and partly

* Isaiah xiv. 22.

from Phœnicia. Those which arrived from Phœnicia were two quinqueres, three quadriemes, twelve triemes, and thirty galleys of thirty oars apiece. These were taken to pieces in Phœnicia, and thence conveyed overland to Thapsacus, upon the river Euphrates, where, being again joined, they were carried down the river to Babylon. The same author also tells us that Alexander had ordered cypress-trees to be cut in that province for building several other ships, they growing there in great plenty :* but forasmuch as other naval stores were wanting, which these parts afforded not, he was supplied with them by the purple-fishers, and other sea-faring men, belonging to Phœnicia and the coast thereabouts. He then dug a deep and capacious basin for a haven at Babylon, capable of containing a thousand sail of long galleys, and built houses for all manner of naval stores adjoining thereto.”

ARRIAN'S *Hist. of Alexander's Expedition*, (ROOKE'S *Trans.*)

Vol. ii. Book 7, chap. 19, p. 164.

“In the mean time, while they were busied in preparing triemes and digging the basin at Babylon, Alexander sailed down the Euphrates to the canal called Pallacopas, which is distant from Babylon about eight hundred furlongs.

“Now Pallacopas is no river arising from fountains, but a canal drawn from the Euphrates. For that river, having its rise among the mountains of Armenia, during the whole winter season is easily confined in its own channel, its waters being then low because the rains turn to snow ; but in the spring, and especially about the summer solstice, the snows melt, and it swells to a prodigious height, and, overflowing all its banks, waters the Assyrian fields on

* None are found there in the present day.—ED.

each side ; and would certainly drown the whole country unless it discharged a vast quantity of its waters through Pallacopas into the lakes and marshes, and thence along the confines of Arabia into a fenny country ; whence, through sundry secret and subterraneous passages, it finds a way to the sea. When the snows are melted and the stock of water thence arising exhausted, which usually happens about the setting of the Pleiades, the Euphrates begins to contract itself ; yet, nevertheless, still the greatest part of the stream runs through Pallacopas into the marshy countries, and thence into the sea. Unless, therefore, the mouth of this canal called Pallacopas were dammed up, and the stream of the river diverted into its proper channel, Euphrates would be so exhausted of its waters as not to afford enough to overflow the Assyrian fields on each side. Wherefore the governor of Babylon had at a vast expense, and with immense labour, obstructed that outlet of the river ; which was the more difficult to perform, because the ground thereabouts was light and oozy, and afforded the water an easy passage through, insomuch that ten thousand men were employed there whole months before they could finish the work. Alexander, coming to the knowledge of this, was resolved to do something for the benefit of the Assyrians ; whereupon he determined to dam up that huge flux of water, out of Euphrates into Pallacopas, in a much more effectual manner than they had already done ; and when he had gone about thirty furlongs from the mouth of the canal, he found the earth rocky, which, if he proceeded to cut through, and continued it to the ancient channel of Pallacopas, the firmness of the earth would not only hinder the water from soaking through and wasting, but also its outlet at the time of the overflow would be rendered much more easy and commodious. On this account Alexander sailed down the river Euphrates to the mouth

of Pallacopas, and, by that canal, into the Arabian territories."

ARRIAN'S *Hist. of Alexander's Expedition*. (ROOKE'S *Trans.*)

Vol. ii. Book 7, chap. 21, p. 169.

"He (Alexander) then, despising the advice of the Chaldeans, because no mischief had befallen him in that city as their oracles predicted (for he had continued in Babylon some time, and gone out again, and no accident happened), being full of himself, resolved to run all hazards, and determined to sail back through the marshes, having the city on his left hand. And when some of his galleys, by reason of the ignorance of their commanders, had lost their way among the numerous windings of the river in those fenny places, he sent them skilful pilots to direct them, and bring the whole navy together. Many of the ancient monuments of the kings of Assyria are said to be placed among those marshes."

Ib., Book 7, chap. 22, p. 170.

Arrian,* in a description of the course of some of the most famous rivers in Asia, says of the Euphrates that it loses itself among the marshes. Upon which is the following note by Rooke :—

"This must undoubtedly be meant of that mighty royal drain or canal called Pallacopas, which was cut to carry off the superfluous water of the river Euphrates, for fear it should overflow its banks and drown the flat countries on each side. It either loses its waters in the marshes of Arabia, or enters the Arabian Gulf by some secret subterraneous passage. But as to the Euphrates itself, or the main stream, Nearchus with his whole fleet entered the

* Arrian, vol. ii. chap. 5 (note), p. 11.

mouth thereof when he sailed up to Babylon to meet Alexander."

See *Arrian*, lib. vii. cap. 19.

"Then he (Alexander) committed the best part of his forces to Hephæstion's care, to conduct them to the Persian Gulf, while he, going on board his fleet, which lay ready at Susa, with his targeteers and *Agema*, and some part of his auxiliary horse, sailed down the river Eulæus to the sea; and when he was now not far from the mouth thereof, leaving there those ships which were shattered and out of order, he, with the best of them, sailed out to the ocean, and then entered the mouth of the river Tigris, the rest of the fleet passing through a canal drawn from thence to the Tigris; for, of the two rivers, Tigris and Euphrates, which enclose Assyria and give it the name of Mesopotamia, the channel of the Tigris, lying much lower, receives the water of the latter by many trenches, and, several streams also falling into its own bosom, it becomes a great river before it glides into the Persian Gulf, insomuch that it is everywhere impassable by a ford; for it spreads not out in breadth, so as to diminish its depth, the lands on both sides being much higher than the water; and it is not dispersed through other channels, nor conveyed into other rivers, but takes them into itself.

"But the Euphrates glides along a much higher channel, and is in many places of equal height with the lands on each side, so that several streams are cut from it (some constant ones), which supply the inhabitants with water; others only occasional, when the neighbouring countries happen to be parched up with drought (for rains seldom fall in these parts); whence it happens that the Euphrates at all its entrances into the ocean is but a small river, and easily fordable.

“ Alexander sailed first down the river Eulæus to the sea, and thence along the Persian Gulf and up the Tigris, to his camp, where Hephæstion with the forces under his command waited his arrival. Thence steering his course to Opis, a city on that river, he commanded all the wears and other impediments which he met with to be pulled up, and the channels to be cleared. These wears were put down by the Persians, who were unskilled in maritime affairs, to render the navigation of that river so difficult as to hinder any enemy’s fleet from invading them that way. However, Alexander looked upon them as the contrivance of cowards; and, as they were little hinderance to him, knowing they would be of no use, he ordered them to be entirely cleared away, and the river laid open.”

ROOKE’S *Translation of ARRIAN’S Hist. of Alexander’s Expedition*,
Vol. ii. book 7, chap. 7, p. 137.

No. 3.

(Referred to in page 57 of the first Memoir.)

“ Ce pays (la Babylonie) est arrosé par plusieurs fleuves ; les plus considérables sont l’Euphrate et le Tigre, qui passent pour les plus grands de l’Asie Méridionale après ceux de l’Inde. On remonte le Tigre jusqu’à Opis (bourgade qui sert de marché pour les cantons environnans) et jusqu’à la ville de Seleucie : quant à l’Euphrate, on le remonte jusqu’à Babylone à plus de 3000 stades de la mer. Les Perses, dans la crainte des invasions du dehors, avaient à dessein empêché qu’on ne peut remonter ces fleuves, en embarrassant leur cours par des cataracts factices. Alexandre, à son arrivée, détruisit toutes celles qu’il put faire dis-

paraître, et principalement (celles du Tigre depuis la mer) jusqu'à Opis.

“ Il s'occupa aussi des canaux. En effet l'Euphrate grossit, à partir du printems, dès que les neiges fondent dans les montagnes de l'Arménie ; et, vers le commencement de l'été il se déborde. Il formerait nécessairement de vastes amas d'eaux, et submergerait les champs cultivés, si l'on ne détournait ses eaux trop abondantes, au moyen de saignées et de canaux, lorsqu'elles sortent de leur lit et qu'elles se répandent dans les plaines, comme celles du Nil en Egypte ; c'est ce qui a rendu les canaux nécessaires. Leur entretien exige beaucoup de travail, parceque la terre (végétale) profonde et molle cède facilement et est entraînée par le courant, qui en dépouille les campagnes : elle remplit le lit des canaux et encombre promptement leurs embouchures ; il en résulte que l'excédant des eaux se répand de nouveau sur les plaines voisines de la mer, y forme des lacs, des étangs, des marais couvert de roseaux et de joncs, que l'on tresse pour en faire toute sorte de vases ; les uns enduit d'asphalte, susceptible de contenir l'eau ; les autres pouvant servir sans autre préparation : on en fait encore des voiles qui ressemblent à des nattes ou à des claies.

“ Il n'est sans doute au pouvoir de personne de s'opposer entièrement à une telle inondation ; mais les bons administrateurs doivent y remédier autant que possible, en formant les ouvertures des canaux pour arrêter la majeure partie des eaux qui s'épancheraient sur les plaines ; en les faisant curer ; en dégagant leurs embouchures, afin d'éviter qu'ils ne s'encombrent pas le dépôt du limon. Le curage des canaux est, à la vérité, facile : mais, pour être en état d'en boucher (à propos) les ouvertures, il faut le secours de beaucoup de bras, parceque le sol, étant mou et cédant facilement, ne soutient pas les terres rapportées : il s'éboule, les entraîne avec lui, et rend l'entrée du canal difficile à

bien fermer. Or la promptitude en ce cas est nécessaire ; car il importe que les canaux soient fermés assez rapidement pour que l'eau n'ait pas le tems de s'en écouler. En effet, lorsqu'ils manquent de l'eau pendant l'été, ils épuisent le fleuve ; et le fleuve, une fois qu'il est trop bas, ne peut plus fournir, quand il le faut, aux canaux d'irrigation l'eau nécessaire, surtout en été, dans un pays brûlé par le soleil. Du reste, la sécheresse et l'abondance des eaux sont également nuisibles ; et il est à peu près égal que les produits du sol soient submergés ou perissent de sécheresse. Il en est de même de la navigation sur les fleuves ou sur les canaux, qui offrent continuellement une grande utilité ; elle est entravée par chacune de ces deux causes ; et le seul moyen d'en corriger les effets c'est d'ouvrir et de fermer les embouchures des canaux avec une égale promptitude, afin de maintenir le niveau de leurs eaux à une élévation moyenne, de manière qu'elles ne puissent être trop abondantes ni venir à manquer.

“ Aristobule dit qu'Alexandre, monté sur une barque qu'il gouvernait lui-même, examina avec attention les canaux, et les fit nettoyer en employant la grande multitude d'hommes dont il s'étoit fait accompagner. Il fit également fermer certaines embouchures, et il ordonna d'en ouvrir d'autres. Il remarqua un canal qui se dirigeait principalement vers les lacs et les marais situés en avant de l'Arabie, et dont l'embouchure, se refusant aux opérations convenables, ne pouvait facilement être fermée, à raison de la mollesse et de la légèreté des terres : il ouvrit un nouveau canal à environ 30 stades, dans un terrain pierreux, et il détourna les eaux de ce côté.”

Géographie de STRABON.—Traduite du Grec en Français. A Paris, de l'Imprimerie Royale, 1819,—Tome v. livre 16, chapitre i. pp. 171—4.

No. 4.

(Referred to in p. 58 of the first Memoir.)

“ WHEN Cyrus got to Babylon he posted his whole army round the city, then rode round it himself, together with his friends, and with such of his allies as he thought proper. . . .

“ When they were encamped, Cyrus summoned to him the proper persons and said, ‘ Friends and allies, we have taken a view of the city round, and I do not find that I can discover how it is possible for one, by any attack, to make oneself master of walls that are so strong and so high ; but the greater the numbers of men in the city are (since they venture not out to fight), so much the sooner, in my opinion, they may be taken by famine. Therefore, unless you have some other method to propose, I say that these men must be besieged and taken in that manner.’ Then Chrysantas said, ‘ Does not this river, that is above two stades over, run through the midst of the city ?’—‘ Yes, by Jove !’ said Gobrias ; ‘ and it is of so great a depth that two men, one standing upon the other, would not reach above the water, so that the city is yet stronger by the river than by its walls.’ Then Cyrus said, ‘ Chrysantas, let us lay aside these things that are above our force. It is our business, as soon as possible, to dig as broad and deep a ditch as we can, each part of us measuring out his proportion, that by this means we may want the fewer men to keep watch.’

“ So, measuring out the ground around the wall and from the side of the river, leaving a space sufficient for large turrets, he dug round the wall on every side a very great ditch, and they threw up the earth towards themselves. In the first place, he built the turrets upon the river, laying their foundation upon palm-trees that were not less than a

hundred feet in length : for there are those of them that grow even to a yet greater length than that ; and palm-trees that are pressed bend up under the weight, as asses do that are used to the pack-saddle. He placed the turrets upon these for this reason, that it might carry the stronger appearance of his preparing to block up the city, and as if he intended that, if the river made its way into the ditch, it might not carry off the turrets. He raised likewise a great many other turrets upon the rampart of earth, that he might have as many places as were proper for his watches. These people were thus employed ; but they that were within the walls laughed at this blockade, as being themselves provided with necessaries for above twenty years. Cyrus, hearing this, divided his army into twelve parts, as if he intended that each part should serve upon the watch one month in the year. When the Babylonians heard this, they laughed yet more than before, thinking with themselves that they were to be watched by the Phrygians, Lycians, Arabians, and Cappadocians, men that were better affected to them than they were to the Persians. The ditches were now finished.

“ Cyrus, when he heard that they were celebrating a festival in Babylon, in which all the Babylonians drank and revelled the whole night, as soon as it grew dark took a number of men with him, and opened the ditches into the river. When this was done, the water ran off by the ditches, and the passage of the river through the city became passable. When the affair of the river was thus managed, Cyrus gave orders to the Persian commanders of thousands, both foot and horse, to attend him, each with his thousand drawn up two in front, and the rest of the allies to follow in the rear, ranged as they used to be before. They came accordingly. He then, making those that attended his person, both foot and horse, to go down into the dry part of

the river, ordered them to try whether the channel of the river was passable. When they brought him word that it was passable, he called together the commanders, both of foot and horse, and spoke to them in this manner :—

“ ‘ The river, my friends, has yielded us a passage into the city. Let us boldly enter, and not fear anything within, considering that these people that we are now to march against are the same that we defeated while they had their allies attending them—while they were awake, sober, armed, and in order ; but now we march to them at a time that many of them are asleep, many drunk, and all of them in confusion : and when they discover that we are got in, they will then, by means of their consternation, be yet more unfit for service than they are now. But in case any one is apprehensive (what is said to be terrible to those that enter a city) that, mounting to the tops of their houses, they discharge down upon us on every side, be still more at ease ; for, if they mount to the tops of their houses, we have then the god Vulcan for our fellow-combatant : their porches are easily set fire to ; their doors are made of the palm-tree, and anointed over with a bituminous matter which will nourish the flame. We have torches in abundance that will presently take fire. We have plenty of pitch and tow that will immediately raise a mighty flame ; so that they must of necessity fly from their houses immediately, or immediately be burnt. Come on, then ; take your arms, and, with the help of the gods, I’ll lead you on.—Do you,’ said he to Gobrias and Gadatus, ‘ show us the ways, for you are acquainted with them ; and, when we are got in, lead us the readiest way to the palace.’—‘ It may be no wonder, perhaps,’ said they that were with Gobrias, ‘ if the doors of the palace are open, for the city seems to-night to be in a general revel ; but we shall meet with a guard at the gates, for there is always one set there.’—‘ We must not, then, be

remiss,' said Cyrus, 'but march, that we may take them as much unprepared as possible.'

"When this was said, they marched; and of those that they met with, some they fell upon and killed, some fled, and some set up a clamour. They that were with Gobrias joined in the clamour with them, as if they were revellers themselves; and, marching on the shortest way that they could, they got round about the palace. They that attended Gadatus and Gobrias in military order found the door of the palace shut; and they that were posted opposite to the guards fell in upon them as they were drinking, with a great deal of light around them, and used them immediately in a hospitable manner. As soon as the noise of a clamour began, they that were within, perceiving the disturbance, and the king commanding them to examine what the matter was, ran out, throwing open the gates. They that were with Gadatus, as soon as they saw the gates loose, broke in; pressing forward upon the runaways, and dealing their blows amongst them, they came up to the king, and found him now in a standing posture, with his sword drawn. They that were with Gadatus and Gobrias, very many in number, mastered him. They likewise that were with him were killed; one holding up something before him, another flying, and another defending himself with anything that he could meet with. Cyrus sent a body of horse up and down through the streets, bidding them kill those that they found abroad; and ordering some who understood the Syrian language, to proclaim it to those that were in the houses to remain within, and that if any were found abroad they should be killed. These men did accordingly. Gadatus and Gobrias then came up, and, having first paid their adoration to the gods for the revenge they had upon their impious king, they kissed the hands and feet of Cyrus, shedding many tears in the midst of their joy and satisfaction.

“ When day came, and they that guarded the castles perceived that the city was taken and the king dead, they gave them up. Cyrus immediately took possession of the castles, and sent commanders with garrisons into them. He gave up the dead to be buried by their relations, and ordered heralds to make proclamation that the Babylonians should bring out their arms; and made it be declared that, in whatever house any arms should be found, all the people in it should suffer death. They accordingly brought out their arms, and Cyrus had them deposited in the castles, that they might be ready in case he should want them upon any future occasion.

“ When these things had been done, then first summoning the magies, he commanded them to choose out for the gods the first-fruits of certain portions of ground for sacred use, as out of a city taken by the sword. After this he distributed houses and palaces to those that he reckoned had been sharers with him in all the actions that had been performed. He made the distributions in the manner that had been determined, the best things to the best deserving; and if any one thought himself wronged, he ordered him to come and acquaint him with it. He gave out orders to the Babylonians to cultivate their land, to pay their taxes, and to serve those that they were severally given to. The Persians, and such as were his fellow-sharers, and those of his allies that chose to remain with him, he ordered to talk as masters of those they had received.”

Cyropedia; or, the Institution of CYRUS, by XENOPHON,
Vol ii. book vii. pp. 317—23.

No. 5.

(Referred to in page 58 of the first Memoir.)

“ Nous arrivâmes le soir d'assez bonne heure pour trouver logis dans un chan ou hostellerie près d'un château désert et abandonné que l'on appelle Birser Chan; d'où étant partis du grand matin le vingt-troisième de Novembre, nous nous trouvâmes justement une bonne heure devant midi sur les vestiges et les ruines de l'ancienne Babel, où nous plantâmes le pavillon, afin d'avoir la commodité de dîner à notre aise, et de nous y arrêter autant de tems qu'il en faudrait pour bien voir et observer toutes choses. Je fis le tour de ces ruines de tous les cotés; je montai au plus haut: je cheminaï par tout au dedans; je fis une revue fort exacte; et enfin vous saurez tout ce que j'y remarquai par le récit que je vais vous en faire.

“ Au milieu d'une plaine fort vaste et toute unie, environ à un bon quart de lieue de l'Euphrate, qui la traverse en cet endroit vers le couchant, se voit encore aujourd'hui assez élevée une masse confuse de bâtimens ruinés qui font un tas prodigieux du mélange des divers matériaux, soit que cela ait été fait de la sorte dès le commencement, comme c'est mon opinion, soit que le débris ait confondu toutes ces ruines, et les ait pêle-mêle réduits à la forme d'une grosse montagne, de quoi il ne paraît aucunes marques, où l'on puisse arrêter son jugement. Elle est de figure quarrée en forme de tour ou de pyramide, avec quatre faces qui répondent aux quatre parties du monde; mais, si je ne me trompe, et si ce n'est pas le désordre des ruines, comme il peut arriver, il semble qu'elle paraît avoir plus de longueur du septentrion au midi que du levant au couchant. Elle peut avoir de circuit, ainsi que je l'ai mesurée tellement quellement environ 1134 pas des miens, qui font bien, à mon avis, un bon quart de lieue. Sa

mesure, son assiette, et sa forme, ont du rapport avec cette pyramide que Strabon appelle le tombeau de Belus : et ce doit être apparemment celle dont la sainte Ecriture fait mention, la nommant la tour de Nembrot en Babylone ou Babel, comme ce lieu s'appelle encore aujourd' hui.

“ * * * Il est à remarquer que, depuis le pied de cette montagne en avant, en ne voit rien, outre ces ruines qui puissent servir de marque assurée pour convaincre l'esprit qu'il y ait eu là autrefois une aussi grande ville que cette fameuse Babylone ; puisque tout ce qui s'y peut découvrir à cinquante ou soixante pas plus loin que cette masse, c'est seulement le reste de quelques fondemens ça et là, lesquels sans doute ont eus au tems passé une juste élévation d'architecture. Pour ce qui est du terrain d'alentour, hors de ces vestiges qui paraissent, c'est un pays très plat, où il semble impossible qu'il y ait eu jamais des bâtimens notables : car, certainement après cette grosse masse de démolitions, tout ce qui se rencontre ailleurs est si uni, que l'on a peine à croire que l'on ait eu le dessein de bâtir en ces lieux cette grande et superbe ville de Babylone, dont les bâtimens étaient si bien fondez, si forts, et si considérables.

“ * * * La hauteur de cette espèce de montagne faite de ruines n'est pas égale partout, mais à du plus et du moins en divers endroits ; néanmoins le plus haut pignon du palais de Naples a beaucoup moins d'élévation. Cette masse, considérée de tous ces côtés, ne peut pas représenter à la vue des figures bien régulières, et ne fait qu'un composé difforme ; ce qui est ordinaire à toutes sortes d'ouvrages ruinés, ou par le tems ou par les hommes. On y voit des endroits plus hauts et plus bas ; ici escarpés, raboteux, et inaccessibles ; là plus adoucis, et d'une pente plus facile à monter : il y a aussi de vestiges de torrens causés par les pluies de haut en bas : et même quand on

est dedans et au dessus, en voit des endroits, les uns plus creux, les autres plus relevés; et enfin ce n'est qu'une montagne de confusion. Il n'est pas possible de reconnaître s'il y a jamais eu de degré pour y monter, et quelques portes pour y entrer; d'où il est aisé de juger que les escaliers étaient tout à l'entour sur les dehors de la place; et que, comme les parties les moins solides, ils ont été les premiers démolis et renversés, en sorte que l'on n'en apperçoit pas la moindre marque.

“ Au dedans, quand on se promene en la partie supérieure, on trouve quelques grottes, mais tellement ruinées, qu'on ne peut pas discerner ce que c'a été: et l'on doute du quelques unes, si elles ont été faites en même tems que fut bati cette ouvrage, ou creusée du depuis par les paysans, pour s'y mettres à couvert, en quoi je trouve davantage de vraisemblance.

* * * * *

“ Cette masse en toutes ces parties fait voir assez que la tour ne fut batié par Nembrot que de grandes et grosses bricques, ce que je remarquai soigneusement, comme une chose forte curieuse, en faisant creuser quelques endroits avec des picques. Il y a apparence que ces bricques n'étaient que de terre creux, sans passer par le feu et sechée seulement au soleil, qui est très ardent en ces quartiers là, peut-être de la même manière que le sont ces mottes de terre que les Espagnols appellent Tappies;* et pour faire la liaison des unes avec les autres, il n'y fut employé ni chaux ni sable, mais seulement de la terre détrempée et pétrie; et dans les lieux qui servaient comme de planchers on avait entremêlé avec cette terre, qui sert de chaux, des roseaux brisés, ou des pailles dures, telles que sont celles dont on fait les grosses nattes, afin de rendre l'ouvrage plus fort.

* This is evidently the same as the Arabic word Tepeh, which means an artificial mound.—ED.

Après on voit d'espace en espace en divers endroits, surtout où il faut de plus forts appuis, plusieurs autres bricques de la même grandeur et grosseur, mais plus solides et cuites au fourneau, et maçonnées avec de bonne chaux, ou de bitume : néanmoins il est certain que le nombre est beaucoup plus grand de celles qui sont seulement sechées au soleil."

Voyages de PIETRO DELLA VALLE.—Tom. i. Lettre xvi. p. 46—50.

No. 6.

(Referred to in page 64 of the first Memoir.)

The following is M. Beauchamp's account of the ruins of Babylon, extracted from the work of Major Rennell, referred to in Mr. Rich's Memoir :—

"The ruins of Babylon are very visible a league north of Hillah. There is in particular an elevation which is flat on the top, of an irregular figure, and intersected by ravines. It would never have been suspected for the work of human hands, were it not proved by the layers of bricks found in it. Its height is not more than 60 yards. It is so little elevated that the least ruin we pass in the road to it conceals it from the view. To come at the bricks it is necessary to dig into the earth. They are baked with fire, and cemented with *zepht* or bitumen; between each layer are found osiers.

"*Above* this mount, on the side of the river, are *those immense ruins* which have served and still serve for the building of Hillah, an Arabian city, containing ten or twelve thousand souls. Here are found those large and thick bricks imprinted with unknown characters, specimens of which I have presented to the Abbé Barthelemy. This place and the Mount of Babel are commonly called by the Arabs *Makloubé*, that is, turned topsyturvy. I was in-

formed by the master mason employed to dig for bricks that the places from which he procured them were large thick walls, and sometimes chambers. He has frequently found earthen vessels, engraved marbles, and about eight years ago a statue as large as life, which he threw amongst the rubbish. On one wall of a chamber he found the figures of a cow, and of the sun and moon, formed of varnished bricks.* Sometimes idols of clay are found representing human figures. I found one brick on which was a lion, and on others a half-moon in relief. The bricks are cemented with bitumen, except in one place which is well preserved, where they are united by a very thin stratum of white cement, which appears to me to be made of lime and sand.

“The bricks are everywhere of the same dimensions, one foot three lines square by three inches thick. *Occasionally* layers of osiers in bitumen are found as at Babel.

“The master mason led me along a valley which he dug out a long while ago to get at the bricks of a wall that from the marks he showed me I guess to have been sixty feet thick. It ran perpendicular to the bed of the river, and was probably the wall of the city. I found in it a subterranean canal, which, instead of being arched over, is covered with pieces of sandstone six or seven feet long by three wide. These ruins extend several leagues to the north of Hillah, and incontestibly mark the situation of ancient Babylon.

“I employed two men for three hours in clearing a stone which they supposed to be an idol. The part which

* Diodorus, lib. ii. c. 1, says that there were drawn *in colours* on the bricks, used in building the wall of the great palace, various animals; also a representation of a general hunting of wild beasts, &c. The bricks were painted before they were burnt.

I got a view of appeared to be nothing but a shapeless mass ; it was evident, however, that it was not a simple block, as it bore marks of the chisel, and there were pretty deep holes in it ; but I could not find any inscription on it. The stone is of a black grain ; and, from the large fragments of it found in many places, it appears that there were some monuments of stone built here. On the *eastern side* I found a stone nearly two feet square, and six inches thick, of a beautiful *granite*, the grain of which was white and red. All these stones must have been brought from some distance, as this part of the desert contains none. On the *same side* of the city, as I was told by the master mason, there were walls of varnished bricks which he supposed to have been a temple.”

MAJOR RENNELL'S *History of Herodotus*, page 367.

No. 7.

(Referred to in p. 73 of the first Memoir.)

Niebuhr says of the ruins of Babylon :—“ Il n'y a aucun doute que Babylone n'ait été située dans la contrée de Helle. Car non seulement les habitans appellent encore aujourd'hui cette contrée Ard Babel, mais on trouve encore ici des restes d'une ancienne ville qui ne peut pas en avoir été une autre que Babylone. A en juger même par ces ruines il semble que Helle se trouve dans l'enceinte de la muraille de la ville de Babylone, mais quand on parle d'antiquités Babylonniennes il ne faut pas s'attendre à de si superbes monumens que l'on en trouve encore en Perse et en Egypte. A Persepolis on trouve le plus beau marbre tout près de la ville et même dans la colline sur laquelle le célèbre palais était bâti. La pierre à chaux dont les grandes pyramides dans le voisinage de Kahira sont faites se trouve à l'endroit même ; outre cela on y rencontre

encore vers le sud, pas loin, et souvent même tout près du Nil, des montagnes de pierre à chaux, et dans la partie méridionale de l'Égypte on trouve même des montagnes de granite tout près de la rivière ; au lieu que sur l'Euphrate et le Tigre on ne trouve rien de pareil, mais seulement de la terre basse, depuis le Golfe Persique, jusqu'à Helle et Bagdad, et plus loin encore au nord. Si les Babyloniens avait voulu bâtir avec des pierres taillées, ils auraient été obligés de les chercher fort loin, et cela leur aurait trop coûté ; c'est la cause qu'ils bâtissaient leurs meilleures maisons avec des briques, de l'épaisseur à peu près des nôtres et d'un pied en quarrée, et ils savaient les cuire aussi parfaitement que je l'aie jamais vu. S'ils avaient fait leurs murailles de ces briques avec de la chaux, on trouverait bien plus de restes de leurs bâtimens qu'il n'y en a actuellement. Mais ils les ont mises dans une matière qui n'attache pas si fort, et qui a fait qu'on a peu à peu démolis ces anciennes maisons, pour en faire de nouvelles maisons dans les villes voisines, et les villages situés sur l'Euphrate. Même un grand et très beau caravanseraï à Helle, où j'étais logé, n'était bâti que depuis peu d'années de ces ruines.

“ Quand à la citadelle et le célèbre jardin pendant, qui d'après ce qu'en disent Strabon et d'autres auteurs Grecs, se trouvent tout près de l'Euphrate, à mon avis, on en trouve des restes, à environ trois quarts d'un mille d'Allemagne, au nord-nord-ouest de Helle, et tout près du rivièrè oriental du fleuve ; le tout ne consiste qu'en de grandes collines toutes ruinées.

“ Les murailles qui se trouvent au dessus de la terre sont emportées il y a déjà long-tems ; mais les murailles de fondement s'y trouvent encore, et moi-même j'ai trouvé ici des gens occupés à tirer de ces pierres pour les transporter à Helle. Au lieu que dans toute la contrée, depuis le Golfe Persique, jusqu'à Kerbela, on ne trouve presque pas

d'autres arbres, que des dattiers et d'autres fruitiers, on rencontre entre les collines de ces ruines ici et là un autre arbre, qui paroît être fort vieux. On voit d'ailleurs dans toute cette contrée au deux côtés de l'Euphrate, de petites collines ruinées pleine de morceaux de briques.

“ Au sud-ouest de Helle à 1¼ de mille, et par conséquent à l'ouest de l'Euphrate, on trouve encore d'autres restes de l'ancienne Babylone ; ici il y a toute une colline de ces belles pierres de murailles dont j'ai parlé, et au dessus il y a une tour qui a ce qui parait être intérieurement aussi toute remplie de ces pierres de murailles cuites. Mais les pierres du dehors (qui sait de combien de pieds d'épaisseur) sont perdues par le tems dans cette épaisse muraille, ou plutôt dans ces grands tas de pierres. Il y a ici et là de petits trous qui percent d'un côté jusqu'à l'autre ; sans doute pour y donner un libre passage à l'air, et pour empêcher au dedans l'humidité, qui aurait pu nuire au bâtiment. Au tems que Babylone étoit encore en fleur, et que toute la contrée des environs étoit remplie de bâtimens ; cette tour doit avoir en une très belle vue, car au pied de la tour on voit Meschid Ali, Mosquée qui est du moins à huit lieues encore d'ici. J'avois vu cette tour dans mon premier voyage à Helle lorsque je le regardois pour une échauguette. Mon guide la nommoit *Birs*, c'est à dire, *Nimrod*, et me racontoit, qu'un roi de ce nom, avoit bâti ici un grand et magnifique Palais.

“ Je n'eus pas occasion de faire ici connaissance avec des savans Mahométans, excepté le Cadi, et celui ci ne savoit rien d'avantage de *Birs* et du Palais, que la fable que je viens de rapporter. Mais en relisant ensuite ce que Herodote dit du temple de Belus et de sa forte tour, il m'a paru très vraisemblable que j'en avois retrouvé là des restes ; et c'est pourquoi j'espère, qu'un de mes successeurs dans ce

voyage en fera de plus exactes recherches, et nous en donnera la description."

Voyage en Arabie, par C. NIEBUHR, Tom. ii. p. 234—236.

No. 9.

(Referred to in p. 80 of the first Memoir.)

The following are the descriptions of Al Hheimar, given by Mr. Buckingham*, who first visited this ruin, and Sir R. K. Porter†, who was there not many years after.

"It was a quarter before nine o'clock," says Mr. Buckingham, "when we departed from hence (Hillah) to extend our excursion more easterly, to which we had been tempted by the sight of the high mounds in that direction, as well as by the report of there being one of particular interest there, called Al Hheimar. * * *

"We pursued our way to the eastward. We passed occasionally long mounds running from N. to S., and saw others crossing them at right angles from E. to W.

"About eleven o'clock we reached a small sheikh's tomb, with a few date trees near it, standing in the middle of a dry and burning waste.

"There were large mounds and a high pyramidal hill in sight beyond this, which still tempted me to go on. My companion, however, being now quite exhausted with the heat, determined to alight here, and go no further; more particularly as we had originally come out on this excursion.

* Travels in Mesopotamia. By J. S. Buckingham.

† Travels in Georgia, Persia, Armenia, Ancient Babylonia, &c. By Sir Robert Ker Porter.

sion in search of a mound called Al Hheimar, which is said to be only five miles to the E. of Hillah, and which, though we were now more than ten miles from that town, in the direction named, we had not yet discovered. I accordingly left Mr. Bellino and the Koord horseman at the tomb to repose in the shade, and pushed on alone, being soon after followed by the horseman whom Mr. Rich had sent with us, and who was unwilling probably to have it thought that he could not brave heat and thirst as well as a stranger.

“ We still went eastward, passing in the way, as before, several detached heaps covered with burnt brick and fine pottery, and crossing two or three large and wide ranges of double mounds going N. and S., which, from their appearance, might either have been canals or streets. * * * Beyond the last of these double mounds scattered fragments of burnt brick began to be more abundant than we had before seen them, and marked the former existence of some great work all along the eastern extremity of the city. These continued to be seen, not in large heaps or connected masses, as is usually the case, but lying loosely on the ground as if they were merely the refuse of better materials taken away from hence; until, in half an hour after quitting the tomb of the saint, we reached the foot of the hill Al Hheimar, which I had come thus far to examine.

“ We found it to be a high mound of loose rubbish, so steep at the base as not to be ascended on horseback, and extremely difficult to get up, even on foot. We went up on the western side, where the ascent was easiest, though there it was still steep; and on the eastern it was apparently much more so. The hill presented at a short distance the appearance of a pyramidal cone, the outline of which formed nearly an equilateral triangle, and its summit seemed to be

crowned by a long and low piece of thick wall, rather like the battlements of a small fortress than a tower. The rubbish below consisted of burnt brick, with scarcely a fragment of pottery; and this circumstance, added to its steep ascent on every side, where all that it varied from a perpendicular, seemed to have been caused by some originally slight slope in the building itself, and the fall of fragments from above, with the comparatively perfect and solid appearance of its summit, induced me at first sight to conclude that it was the remains of a solid and extensive wall, and formed no part of any open building."

The heat and the impatience of his companion prevented Mr. Buckingham staying more than a few minutes at Al Hheimar; but he adds, "I was enabled on the following day at Hillah, in a quiet apartment of the khan at which we lodged, to reduce to writing what was then fresh in my recollection.

"The base of the mound of Al Hheimar, at this eastern extremity of our excursion through the ruins of Babylon, appeared to me to be from 300 to 400 feet in circumference; its form was rather oval than circular; its greatest length being apparently from N. to S., and its lesser from E. to W., so that its breadth or thickness through, at the bottom, might have been from eighty to one hundred feet. Its height appeared to be equal to that of the lowest part of the Mujellibé, or from seventy to eighty feet, and nearly equal to the breadth of its own base. On ascending to its summit, we found there a mass of solid wall about thirty feet in length by twelve or fifteen feet in thickness; yet evidently once of much greater dimensions each way, the work being in its present state broken and incomplete on every side. The height of the mass was also probably diminished from its original standard; but of this it was not so easy to judge, as, whatever number of layers of bricks might have

been removed, a smooth surface remained where the cement was worn away by time, which is not the case with any dilapidation of the sides or facings of walls, though it necessarily would be with their summits.

“ Nothing was more evident, however, than that this was a solid mass of wall, and no part of it a chambered or inhabited edifice. Its appearance indicated that it had been built on an inclined slope from the westward or interior face, at least that being the side on which our ascent was made ; its dimensions being from eighty to one hundred feet thick at the base, twelve to fifteen feet thick at the top, and seventy to eighty feet in perpendicular height. The bricks were of the usual square form and size, of a reddish yellow colour, with slight appearances of chopped straw having been used in their composition, but not very decidedly marked : they had not, in any instance that I could perceive, inscriptions, figures, or writing on their surface. The cement used to connect the layers was extremely thin, and of the same colour with the bricks themselves, but not of the extraordinary tenacity of that at the Kasr ; nor was the masonry so neat and highly finished, being perhaps of an earlier date.

“ The greatest peculiarity observed at this pile, and one which hitherto, at least, is unique in the known ruins of Babylon, was, that at intervening spaces rather wider than those of the reeds at Akkerkoof, and recurring at every fifteenth or twentieth course of bricks, appeared a layer of an extremely white substance, which was seen in small filaments on the bricks, like the crossing of fine pieces of straw ; or, as it struck me forcibly on the spot, like the texture of the Egyptian papyrus. Between two of the bricks, that I separated with much ease from the pile, the layer of this substance seemed about a quarter of an inch thick. The filaments were clearly discernible, and, when

fresh, the whole substance was of a snowy whiteness, and had a shining appearance, like the finest mineral salts, or like the fibres of the glass feathers made in England. On merely touching it lightly with the finger, it came off in a white powder on the flesh, like the substance left on the fingers after touching a butterfly's wing; and on attempting with a knife to take off the layer itself, as a whole, it fell to pieces like the white ashes of a thoroughly-burnt piece of wood, and, from the extreme lightness of the particles, was instantly dispersed in the air."

BUCKINGHAM'S *Travels in Assyria*.—Quarto edition, p. 438—445.

Sir R. K. Porter thus describes Al Hheimar:—

November 22nd—"Another gigantic object worthy of note lay pretty far on the eastern side of the Euphrates; and again attended by my escort, I set forth this morning to resume my researches in that quarter. The pile in view is called Al Hymer. Its distance from the western suburb of Hillah cannot be less than eight miles and a half; and from the eastern bank of the Euphrates opposite Anana, in a direct line, it may be about seven miles and a half. On clearing the gardens in the vicinity of Hillah, we bent our course N. 30 E. for full an hour. The country as usual was perfectly flat, except where interrupted by the endless traversings of old canal beds; some of which are of prodigious width, and of an answering depth and steepness, often so abrupt as to be exceedingly troublesome to pass. Those of largest dimensions generally run S. E. and N. W., and the lesser, N. and E. * * * *

"Having ridden an hour, we took a direction due E., crossing, at different distances, three other canals in a course from N. to S.; the last of the three was very wide, and not

more than a mile from Al Hymer, the whole of which intervening space is covered with broken bricks, pottery, glass, and all the other usual relics of Babylonian ruins. When we reached the great mound itself, which had long been a conspicuous object above the horizon, I found it to be pyramidal, with numerous dependent smaller mounds. Its base was nearly circular, in circumference 276 yards, and in height about 60. One-third of its elevation is composed of unburnt brick, the rest of the pile of that which has passed through the fire. A large and solid mass of the latter surmounts the whole, standing clear from any of the loose rubbish which so abundantly encumbers its base. The fire-baked bricks on the outside, by some cause, have become extremely soft; and I should ascribe that effect to their complete exposure to the external air; they then break with ease on the slightest force; but, on penetrating into the solid building, I found them as hard as any others of Babylonia. In broad square surface they exceeded those of the Birs and the Kasr nearly three quarters of an inch; but the thickness was not more than in those of the Birs. The whole of this mass, as it stands on its rounded ruin-encumbered foundation presents four straight faces, but unequal and mutilated, looking towards the cardinal points. That to the S. measures 39 feet, the N. 37, the E. 48, and the W. 51. Through them all the usual air-channels traverse each other. The courses of the bricks differ in this building from any I had hitherto remarked, a layer of clay only seeming to be their cement; though at the unequal distances of four, five, six, or seven bricks, a bright white substance appears in some places an inch thick, as if spread between them. Whether it may originally have been the common bed of reeds, transformed thus by some peculiar operation of the air or of the earth that com-

posed the bricks, I am not natural philosopher enough to decide, though the softened state of the exterior bricks may authorize the latter supposition, from an idea that the same action of the air which wrought on the particular clay of the brick, might, from the partial decomposition of the one, thus strangely affect the substance of the other. But I have brought a specimen of the powder away with me, which may hereafter enable some European chemist to investigate the fact.* No cement whatever was mixed with it. Lime was no where traceable. I closely examined the broken fragments of brick-work below, and found only quantities of bitumen. The burnt bricks I have already described as forming the solid summit of the mound are very coarsely finished; but the masses found at its foot in different places are of fine clay, of the best kiln-baked fabric. They differ in size from any others I had seen, being fourteen inches long, twelve and three quarters broad, and about two and a half thick; those I had examined in the great piles of the Birs, the Kasr, &c., usually measuring thirteen inches square, and three in thickness. During my examination of Al Hymer I was so fortunate as to obtain an entire brick of this beautiful construction; and found its inscription also varying from those of the preceding piles; hence I may call it an unique specimen. It contains ten lines of cuneiform letters in an upright column.

“While standing on the mount of Al Hymer, we perceived, at some little distance to the eastward, a considerable group of mounds appearing nearly equal in height to the one we then occupied. To these we directed our horses’

* “Subsequent chemical examination of the white powder found at Al Hymer proves it to be no calcareous cement, but principally composed of common earthy matter; and therefore probably produced by the causes above suggested.”

heads ; and found the distance between the one we left and those to which we were going, about 1656 yards ; the intermediate track being divided by a deep and highly-embanked old canal, which ran S. 25 E. * * *

“ Minor elevations covered the plain on every side ; and we quickly ascended the highest of the prominent group. It was not inferior in height to Al Hymer, and of the same conical form. From its base three branches projected, of less elevation ; two running S. and S. W. ; and the third, the longest, to the N. ; from which struck eastern and western ramifications. This central mound and its adjuncts stood perfectly detached from all others in an open area ; nearly surrounded towards the N. and N. E. by a deep chain of minor mounds covered with the usual fragments of scattered ruins.

“ In a direction N. 20 E. we observed another high mound, standing quite alone ; in altitude nearly equal to the last described, but of an oblong shape, or rather like a compressed horse-shoe, open to the E. Its length was 161 yards, and its breadth, equal in every part, 46 yards. It stood E. and W. * * * *

“ On returning, by the base of the great ramified mound I observed a low, continued ridge, like what might once have formed a vale. It was distant from the mound 460 yards, in a direction S. 30 W. There were no remains of a ditch. This was the extent of our Babylonian observations to the E. ; and, on proceeding back to Hillah, I took a course more to the S. In this direction we passed through the beds of the same canals we had traversed on our approach, though in different places, and halted for a short time at a tomb prettily situated among some date-trees, called that of Ali Abu Hassan.

“ In our way we afterwards saw spots where traces of

former habitations were visible, though not so much from unevenness in the ground as by the strewn fragments of ruin, and its nitrous effects. The tomb is rather more than five miles from Hillah, which we reached by sunset; that is, about six minutes past five o'clock."

SIR R. K. PORTER'S *Travels in Georgia, Persia, &c.*

Quarto, Vol. ii. p. 390—397.

No. 10.

(Referred to in p. 81 of the first Memoir.)

Ives says of Akerkouf, or, as it is commonly called, Nimrod's Tower,—“ It lies W. by N., distant about nine miles. We passed the Tigris by the same bridge of boats before mentioned, and rode through the old city of Bagdad; from whence, quite up to the tower, ruins of buildings, either wholly above or somewhat under ground, are still to be seen; which can be no other than the remains of the ancient *Seleucia*. The ground began to rise in a gentle ascent for half a quarter of a mile before we reached the tower, occasioned, as we imagined, by the rubbish of the old buildings which once stood here. Whether the tower was at first of a square or round form is now difficult to determine, though the former is most probable; because all the remaining bricks are placed square, and not in the least circular. The bricks are all twelve inches square, and four inches and a half thick. The cement is of mud or slime mixed with broken reed, as we mix hair with mortar; which slime might either have been had from one of the great rivers, or taken out of one of the swamps in the plain, with which the country hereabouts very much abounds.

We passed one of these swamps in our way, which was about 100 yards broad, and four feet deep. * *

“ The height of the ruin is 126 feet ; the diameter of the largest and middle part, about 100 feet. We judge it to be solid to the centre ; yet near the top there is a regular opening of an oval form, but, as we could not climb up to, can determine nothing positive about it : it appears, however, from the present look, to have been a window. The circumference of that part of the tower which remains, and is above the rubbish, is about 300 feet ; but, probably could the foundation be come at, it would be found of far greater extent.”

IVES'S *Travels*.—Quarto, p. 297, 298.

No. 11.

(Referred to in p. 82 of the first Memoir.)

“ Babylone est également située dans une plaine ; les murailles ont 385 stades de circonférence, et 32 pieds d'épaisseur ; leur hauteur est entre les tours de 50 coudées, et de 60 coudées en y comprenant celle des tours ; la largeur suffit pour que deux quadriges puissent facilement y courir en sens contraire. Aussi ces murailles sont mises au nombre des sept merveilles, de même que le jardin suspendu, qui a la forme d'un carré dont chaque coté est de quatre plithres. Il est composé de (plusieurs) terrasses voutées, qui s'élèvent les unes au-dessus des autres, soutenues sur des gros piliers. Les piliers sont creux et remplis de terre, de manière à pouvoir contenir les racines des plus grands arbres ; ces piliers ainsi que le sol de chaque terrasse et les voutes sont construits en briques

cuites, assemblées avec de l'asphalte. On arrive à l'étage supérieur par des escaliers, les long desquels on a disposé *des limaces* ; des hommes commis à cet effet, les mettent sans cesse en mouvement et font monter l'eau de l'Euphrate dans le jardin situé près du fleuve ; ce fleuve large d'un stade coupe la ville par le milieu ; sur ses bords s'élève également le tombeau de Belus maintenant détruit, et qui le fut, dit-on, par Xerxes. C'étoit une pyramide carrée de briques cuites, ayant un stade de hauteur et de coté. Alexandre avoit en l'intention de la retablir ; mais l'ouvrage demandait beaucoup de travaux et de temps, puisqu'il eut fallu deux mois pour que 10,000 ouvriers parvinssent seulement à déblayer les terres et les décombres : aussi Alexandre ne put-il achever ce qu'il avoit enterpris, parcequ'il mourut presque aussitot de maladie. Après lui personne ne s'occupa de ce monument ; le reste fut également négligé ; et la ruine (successive) de cette ville, devint l'ouvrage à la fois des Perses, du temps, et des Macédoniens, dont l'insouciance pour les choses de ce genre augmenta surtout après que Seleucus Nicator eut fortifié Seleucie sur le Tigre à environ 300 stades seulement de Babylone.

“ En effet, ce souverain et tous ses successeurs eurent une grande prédélction pour cette ville nouvelle, et y transportèrent le siège de leur empire ; aussi elle est devenue maintenant plus grande que Babylone : celle-ci est en grande partie déserte, en sorte qu'on peut lui appliquer ce qu'un poète comique disoit de Megalopolis en Arcadie :—

“ La grande ville n'est plus qu'un grand désert.”

“ Vu la rareté du bois de charpente les poutres et les piliers des édifices particuliers sont en bois de palmier ; au tour des piliers, on dispose en spirale des cordelettes de joue que l'on peint ensuite de divers couleurs ; les portes sont enduite d'asphalte ; on les tient hautes ainsi que les maisons

elles-mêmes, qui toutes sont voutées à cause du manque de bois de charpente ; car le pays est en grande partie couvert de taillis, n'ayant d'autres arbres (de haute futaie) que le palmier. Cet arbre qui vient en très grande quantité dans la Babylonie, se trouve abondamment aussi dans la Susiane, sur la coté de la Perse et dans la Caramanie.

“ On n'a point en Babylonie l'usage des toits recouverts en tuiles, parceque les pluies y sont peu abondantes ; la même chose a lieu pour la Susiane et la Sitacene.”*

Géographie de STRABON.—Tome v., livre 16.

No. 12.

(Referred to in p. 87 of the first Memoir.)

“ We arrived at length, on the 24th day of October, at night, near to Felugo or Elugo.

“ The village Elugo lyeth on the place where formerly Old Babylon did stand. The harbour lyeth a quarter of a league off, whereinto those use to go, that intend to travel by land to the famous trading city of Bagdad, which is one day and half distant. At this harbour is the place where the old town of Babylon did stand ; but at this time there is not a house to be seen. This country is so dry and barren that it cannot be tilled, and so bare, that I

* The following passage in the above-mentioned author, regarding the manners of the Assyrians, throws some light on the cylinders and gems found in such profusion among the ruins of Babylon :—

“ Ils portent une tunique de lin trainante et un surtout de laine blanche ; leur chevelure est courte, et leur chaussure ressemble à une *embade*. Chacun porte un cachet au doigt ; et une canne, non simple et grossière, mais travaillée d'une manière remarquable, et surmontée d'une pomme, d'une rose, d'un lis, ou de quelque chose de semblable.”—ED.

should have doubted very much whether this potent and powerful city (which once was the most stately and famous one of the world, situated in the pleasant and fruitful country of Sinar) did stand there, if I should not have known it by its situation, and several ancient and delicate antiquities that still are standing hereabouts, in great desolation. First, by the old bridge which was laid over the Euphrates (which also is called Sud by the prophet Baruch, in his first chapter), whereof there are some pieces and arches still remaining, and to be seen this very day a little above where we landed. These arches are built of burnt bricks, and so strong that it is admirable; because all along the river from Bir, where the river is a great deal smaller, we saw never a bridge. The river is here at least half a league broad, and very deep. Near the bridge are several heaps of Babylonian pitch, to pitch ships. Something further, just before the village Elugo, is the hill whereon the castle did stand, in a plain, whereon you may still see some ruins of the fortification, which is quite demolished and uninhabited: behind it, pretty near to it, did stand the tower of Babylon. This we see still, and it is half a league in diameter; but it is so ruined and full of vermin, that one may not come near it within half a mile, except in two winter months, when they come not out of their holes.”—(page 174.)

“ From this tower, two leagues distant eastward, lieth the strong town *Fraxt*, which was formerly called Apamea, mentioned by Pliny (Book vi. chap. 20 and 27), between the Tigris and Euphrates, which two rivers, not far below, are united.

“ *October 26th.*—Early in the morning, with camels and asses to carry our goods, we set out for Bagdad. In the beginning the ways were very rough with the stones and ruins; but after we passed the castle and town of

Daniel, the dry deserts began again, where nothing was to be seen but thorns ; neither men, nor beasts, nor caves, nor tents. By the way we saw in the plain many large, ancient, high, and stately buildings. Arches and turrets standing in the sand (which is very fine, and lieth close together, as you find it in the vallies) here and there, whereof many were decayed and lay like ruins : some to look upon were pretty entire, very strong, adorned with artificial works. Thus they stand, solitary and desolate, save only the *steeple of Daniel*, which is entire, built of black stones, and inhabited still unto this day. It is in height and building something like unto our steeple of the Holy Cross Church, or St. Maurice in Augsburg, on which, as it stands by itself, you may see all the ruins of the old Babylonian tower, the castle-hill, together with the stately buildings, and the whole situation of the old town, very exactly. After we had travelled twelve hours through desolate places, very hard, so that the camels and asses began to be tired, we lodged ourselves near to an ascent. I considered and reviewed this, and found that there were two walls, one behind the other, distinguished by a ditch, like unto two parallel walls, and that they were open in some places, where one might go through like gates : wherefore I believe that they were the wall of the old town that went about there, and that the places where they were open have been anciently the gates (whereof there were 100 iron ones) of that town : and this the rather, because I saw in some places under the sand the old wall plainly appear. So we found ourselves to be just lodged in that formerly famous kingly city.”—(*page 176.*)

“ Start off again on the night of the 26th, and at two hours before day arrived at Bagdad.”—(*page 179.*)

LEONHEART RAUWOLFF'S *Travels*.—From Ray's Collection of Travels.

The following account of these ruins is by John Eldred, an English merchant, who travelled in the year 1583 :—

“ We landed at Felugia the 8th and 20th of June, where we made our abode seven dayes, for lack of camels to carie our goods to Babylon. The heat at that time of the yeare is such in those parts that men are loath to let out their camels to travell. This Felugia is a village of some hundred houses, and a place appointed for dischargeing of such goods as come downe the river : the inhabitants are Arabians. Not finding camels here, we were constrained to unlade our goods, and hired an hundred asses to carie our English merchandizes onely to New Babylon, over a short desert ; in crossing whereof we spent eighteen houres, travelling by night and part of the morning, to avoid the great heat.

“ In this place, which we crossed over, stood the olde mightie citie of Babylon, many olde ruines whereof are easilie to be seene by daylight, which I, John Eldred, have often beheld at my good leisure, having made three voyages betweene the new citie of Babylon and Aleppo, over this desert. Here also are yet standing the ruines of the olde tower of Babell, which, being upon a plaine ground, seemeth a farre off very great ; but the nearer you come to it, the lesser and lesser it appeereth. Sundry times I have gone thither to see it, and found the remnants yet standing, above a quarter of a mile in compasse, and almost as high as the stone-worke of Paule’s steeple in London,—but it sheweth much bigger.* The bricke remaining in this

* “ For about seven or eight miles from Bagdad, as men passe from Felugia, a towne on Euphrates, whereon Old Babylon stood, to this new citie on Tigris (a work of eightene houres, and about forty miles space) there is seen a ruinous shape, of a shapelesse heape and building, in circuit less than a mile, about the height of the stone-

most ancient monument be halfe a yard thicke and three-quarters of a yard long, being dried in the sunne onely; and betweene every course of bricks there lieth a course of mattes made of canes, which remaine sound and not perishe, as though they had beene layed within one yeere. The citie of New Babylon joyneth upon the aforesaid small desert, where the olde citie was, and the river of Tigris runneth close under the wall, and they may, if they will, open a sluice, and let the water of the same river round about the towne. It is about two English miles in compasse, and the inhabitants generally speake three languages; to wit, the Persian, Arabian, and Turkish tongue.

“The people are of the Spanyard’s complexion and the women generally weare in one of the grisles of their noses a ring like a wedding-ring, but somewhat greater, with a pearl and a Turkish stone set therein; and this they do be they never so poore.”

HAKLUYT’S *Collection of Travels*.—Small folio. 1589, p. 239.

worke of Paule’s steeple in London, the bricks being six inches thicke, eight broad, and a foot long (as Master Allen measured), with mats of canes laid betwixt them, yet remaining as sound as if they had beene laid within a yeere’s space. Thus Master Eldred and Master Fitch, Master Cartwright also, and my friend Master Allen, by testimony of their own eyes, have reported. But I can scarce think it to be that tower or temple, because authors place it in the midst of Old Babylon, and neere Euphrates; whereas this is neerer Tigris.^a Isidore affirmeth that first after the Floud, Nimrod the Giant founded Babylon, which Semiramis the Assyrian queene enlarged, and made the wall with bricke and bitumen.—*Purchas his Pilgrimage*, chap. ii. p. 50, folio edition, 1626.

^a The tower here described is evidently no other than Akerkounf, in the neighbourhood of Bagdad, and a very Babylonian-looking ruin, but situated not less than between forty and fifty miles distant from the supposed Babylon of these travellers, and the real Babylon at Hillah.—ED.

No. 13.

(Referred to in page 91 of the first Memoir.)

The whole of the passages in the work of Major Rennell, a part of which is referred to by Mr. Rich, are as follow:—

“ Herodotus has not said in which of the divisions of the city the temple and palace respectively stood; but it may be pretty clearly collected from Diodorus that the temple stood on the *east* side, and the palace on the *west*; and the remains found at the present day accord with this idea. For Diodorus describes the great palace to be on the *west* side, the lesser palace on the *east*; and there also was the brazen statue of *Belus*. Now he makes such a distinction between the two palaces, as plainly to show that the one on the west was to be regarded as ‘The palace;’ and, consequently, was *the* palace intended by those who place a palace to answer, on the *one* side, to the temple of Belus on the *other*. It is also to be collected from Herodotus, Clio, 181, that the palace and the citadel were the same. He says ‘the royal palace fills a large and strongly-defended space—in the centre of one of the divisions.

“ Diodorus says that the temple stood in the centre of the *city*; Herodotus, in the centre of *that division* of the city in which it stood; as the palace in the centre of its division. But the description of Diodorus is pointed, with respect to the fact of the palace being near to the bridge, and consequently, to the river-bank: and he is borne out by the descriptions of Strabo and Curtius, both of whom represent the hanging-gardens to be very near the river: and all agree that they were within, or adjacent to, the square of the *fortified palace*.* They were supplied

* Strabo, p. 738.—He says that the “ Euphrates flows through the middle of the city, and the pensile gardens are adjacent to the river; from whence they were watered.”

with water, drawn up by engines, from the Euphrates. Consequently the palace should have stood nearer to the centre of the city itself, than to that of the division in which it stood; since the division was more than four miles broad: and it appears natural enough that the princess should avail herself of the prospect of a noble river, a stadium in breadth, flowing near the palace, instead of withdrawing two miles from it: and it appears probable that the temple was also at no great distance from the opposite bank of the river; that is, the *eastern* bank.*

“ A presumptive proof of the supposed position of the temple, should the words of Diodorus be regarded as ambiguous, is, that the gate of the city named *Belidian*, and which we must conclude to be denominated from the temple, appears pretty clearly to have been situated on the *east* side. When Darius Hystaspes besieged Babylon (Thalia, 155, *et seq.*), the Belidian and Cissian gates were opened to him by Zopyrus, and the Babylonians fled for refuge to the temple of Belus, as, we may suppose, the nearest place of security. The Cissian or Sussian gate must surely have been in the eastern front of the city, as Susa lay to the east, and, by circumstances, the *Belidian* gate was near it; as the plan was laid that *Persian* troops were to be stationed opposite to these gates; and it is probable that matters would be so contrived as to facilitate as much as possible the junction of the two bodies of Persian troops that were first to enter the city as a kind of forlorn hope.

* Here it is proper to remark that there is this specific difference between the descriptions of Herodotus and of Diodorus: the first says that the centres of the two divisions were occupied respectively by the palace and temple; but Diodorus, by *two* palaces: and although he speaks of the temple also, yet he does not point out its place. The square of the temple itself was two stadia.

“ It may also be remarked that the gates at which the feints were made, previous to the opening of the Belidian and Cissian, were those of Ninus, Chaldea, and Semiramis. The first, towards Ninus or Nineveh, must have been of course to the *north*, and the Chaldean, to the *south*; and perhaps that of Semiramis, to the *north-east*, between the Belidian and Ninian; as that of Cissia, to the *south-east*, between the Belidian and Chaldean. As it is unquestionable that the Ninian and Cissian gates, if not the Chaldean, were in the eastern division of Babylon, since the countries from whence they are respectively denominated lie to the east of the Euphrates, it may be collected that the attack was confined to that division alone (and what army could invest a fortress thirty-four miles in circuit?): and if this be admitted, the Belidian gate and temple of Belus must have stood on the east side of the Euphrates.”

MAJOR RENNELL, *on Herodotus*, p. 355—357.







